

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
NORTHERN PLAINS AREA

COMPARISON OF WINTER WHEAT VARIETIES GROWN IN
COOPERATIVE NURSERY EXPERIMENTS IN THE HARD
WINTER WHEAT REGION IN 1998

BY

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Germplasm in the Hard Winter Wheat Regional Nursery Program is distributed and evaluated under guidelines of the 'Wheat Worker's Code of Ethics', as adopted by the National Wheat Improvement Committee, Nov. 5, 1994.

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Germplasm

1. KS96WGRC34, KS96WGRC35 AND KS96WGRC36 leaf rust resistant hard red winter wheats were released by the Kansas Agricultural Experiment Station and the USDA-ARS.
2. KS96WGRC37 powdery mildew resistant hard red winter wheat was released by the Kansas Agricultural Experiment Station and the USDA-ARS.
3. KS96WGRC38 AND KS96WGRC39 tan spot resistant wheats were released by the Kansas Agricultural Experiment Station and the USDA-ARS.
4. KS96WGRC40, a hard winter wheat with resistance to wheat curl mite, Stagonospora leaf blotch and Septoria leaf blotch was released by the Kansas Agricultural Experiment Station and the USDA-ARS.

Cultivars

1. TAM301 (TX89D9627), Texas Agricultural Experiment Station, **Crop Science** 38: 552.
2. Windstar (NE90625), Nebraska Agricultural Experiment Station and USDA-ARS, **Crop Science** 38: 894.
3. Elkhorn (ND8933), North Dakota Agricultural Experiment Station and USDA-ARS, **Crop Science** 38: 1403.
4. Cossack and Enhancer, both from Goertzen Seed Research, Haven, Kansas.
5. Onaga, AGSECO, Girard, Kansas.
6. Ransom (ND8955), North Dakota Agricultural Experiment Station and USDA-ARS.
7. Prairie Red (CO940623), Colorado Agricultural Experiment Station.
8. Thunderbolt (W95-188), Agripro Seeds, Inc.

1998 Southern Regional Performance Nursery

Entry No.	Cultivar or Pedigree	Sel. No.	Source
1	Kharkof	CI1442	Check
2	Scout 66	CI13996	"
3	TAM-107	PI495594	"
4	HBV756A/Sxl//2180	OK94P549	Oklahoma
5	OK86216/Crr sib//2180	OK95548	"
6	OK87W663/Mesa//2180	OK95571	"
7	Mesa/OK88701	OK95593	"
8	Rio Blanco/TAM-200	OK95G701	"
9	TXGH12588/TX86D1317	TX91D6825	TX, Dallas
10	Kavkaz/TX86D1308//Sturdy/TAM-300	TX91D6856	"
11	NE83407/3/FLN/ACC//ANA	TX94V2327	Texas
12	Rio Blanco/Bai Quan #3039	TX95V4926	"
13	NE83407/TX88V4834	TX95V4933	"
14	TX88V4914/NE83407	TX95V5332	"
15	TX85V1326/Karl	TX94V2130	"
16	Yuma-R21	CO940700	Colorado
17	KS87H325/Rio Blanco	KS95HW62-6	KS, Hays
18	PI220350/KS87H57//TAM-200/KS87H66/3/KS87H325	KS95H167-3	"
19	PI220350/KS87H57//TAM-200/KS87H66/3/KS87H325	KS95H176-1	"
20	KS8010-72/KS811252	KS90175-3	KS, Manhattan
21	KS8010-73/KS8010-1-4-2//107349/KS811252/Karl	KS89180B-2-1	"
22	HBA142A/HBZ621A//Abilene	KS97P0630-4-5	"
23	2180/Karl//2163	KS97W0935-29-15	"
24	KS82W428/Vee'S//VIC/BOW/3/PVI124-79	KS91W009-6-11	"
25	KS831936-3//Colt/Cody	N95L158	NE, ARS
26	NE85707/Thunderbird	NE93496	Nebraska
27	Abilene/Norkan//Rawhide	NE94632	"
28	W84-179/W81-171/3/Sturdy/Hawk//Vona/W76-1141	W95-210	Agripro
29	Abilene/KS90WGRC10	W95-188	"
30	TAM-200/Abilene/6/Era/Tobari 66//Lovrin 11/3/Oligoculm/4/Archer/5/W81-171	W94-244-132	"
31	KS85W663-2-4/3/Vona/W76-1141//Thunderbird	W95-301	"
32	Vona/W76-1141//N84-0758/3/Arlin	W95-221	"
33	Quantum Hybrid Wheat	WX94-3504	HybriTech
34	" "	XH1881	"
35	" "	XH1875	"
36	" "	WH1872	"
37	T67*2/T80	T99	Trio
38	T67*2/Karl	T100	"
39	5630 sib//Vona/Talent	T101	"
40	T702/Karl	T102	"
41	Oelson/Hamra//Australia 215/3/Karl 92	G14264	Goertzen
42	Cebeco/Lilifen//Hail/3/Karl92/4/CO2643//Can/Era	G15048	"
43	Sut/*5AG/Max//CIMMYT line/3/Abilene	G15011	"
44	Random mating population	G15458	"
45	Russian population selection	G15111	"

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Clovis (dryland), New Mexico Four Replications					
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1
TX94V2130	15	2842	76.7	64	142
KS95HW62-6	17	2800	76.2	63	143
N95L158	25	2607	75.4	55	141
OK95548	5	2535	76.3	60	141
G15011	43	2532	75.5	62	142
W94-244-132	30	2429	76.9	61	141
W95-301	31	2384	76.3	61	139
KS89180B-2-1	21	2370	76.0	55	142
XH1881	34	2349	74.8	60	142
T99	37	2315	76.5	63	141
G15048	42	2272	76.3	58	140
KS95H176-1	19	2270	76.3	69	142
OK94P549	4	2263	76.8	56	139
T100	38	2254	75.9	58	143
TX91D6856	10	2228	74.6	61	142
WX94-3504	33	2172	76.5	56	142
G15111	45	2154	76.3	58	139
KS95H167-3	18	2145	74.7	61	141
OK95571	6	2124	76.8	64	141
T102	40	2098	76.1	58	143
CO940700	16	2064	76.1	67	142
W95-221	32	2054	76.3	57	140
XH1872	36	2049	75.5	61	141
XH1875	35	2034	75.3	63	142
TX94V2327	11	2032	74.7	58	140
T101	39	2013	74.1	59	141
TX95V4926	12	2007	75.4	57	139
KS90175-3	20	1971	77.0	56	141
W95-188	29	1958	77.0	62	141
OK95593	7	1892	75.3	63	142
TAM-107	3	1880	76.8	60	144
OK95G701	8	1879	77.8	58	141
G15458	44	1865	76.4	58	141
G14264	41	1847	76.1	57	141
KS97W0935-29-15	23	1843	76.0	64	139
Scout 66	2	1841	75.9	60	139
KS91W009-6-1	24	1813	75.0	62	142
TX91D6825	9	1673	74.9	61	142
NE94632	27	1639	75.5	62	141
TX95V4933	13	1623	75.4	55	141
TX95V5332	14	1623	75.7	52	139
W95-210	28	1614	75.7	61	143
NE93496	26	1580	76.5	58	142
Kharkof	1	1474	75.4	72	139
KS97P0630-4-5	22	1405	76.3	53	140
Mean		2063	76.0	60	141
LSD (0.05)		n.s.	n.s.	9	2
C.V. (%)		28.3	1.8	7.1	4.1

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Clovis (irrigated), New Mexico Four Replications					
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1
OK95571	6	4747	73.8	91	137
TX94V2130	15	4603	73.4	90	136
T102	40	4571	74.9	95	138
OK95548	5	4461	75.3	88	140
TAM-107	3	4414	74.1	89	137
KS95HW62-6	17	4351	73.1	91	137
N95L158	25	4306	70.2	90	139
XH1875	35	4221	72.0	98	139
XH1872	36	4204	72.4	90	139
KS95H167-3	18	4176	73.1	93	139
OK94P549	4	4172	72.5	95	136
WX94-3504	33	4074	74.7	94	138
G15011	43	4054	73.2	96	139
KS89180B-2-1	21	4053	72.8	88	138
TX95V4933	13	4049	73.1	94	137
W94-244-132	30	4015	74.7	93	139
T101	39	3958	72.5	88	139
KS90175-3	20	3883	75.8	89	140
OK95593	7	3827	76.2	90	139
XH1881	34	3782	70.8	93	137
W95-301	31	3771	75.0	93	138
KS97P0630-4-5	22	3724	73.1	89	139
TX91D6856	10	3560	71.3	90	139
G14264	41	3525	75.0	90	138
G15048	42	3483	73.6	91	136
TX95V4926	12	3388	73.6	94	138
G15111	45	3375	72.1	85	138
KS95H176-1	19	3353	72.6	95	140
CO940700	16	3326	74.5	93	138
KS97W0935-29-15	23	3244	71.3	93	139
NE93496	26	3234	75.0	94	137
W95-221	32	3167	71.7	95	138
G15458	44	3167	73.3	89	136
W95-188	29	3101	73.1	96	138
OK95G701	8	2907	75.4	91	138
T99	37	2897	72.4	91	141
TX95V5332	14	2871	72.8	93	141
TX94V2327	11	2827	72.0	92	136
T100	38	2818	73.7	93	139
TX91D6825	9	2637	71.9	95	137
W95-210	28	2500	73.6	90	136
NE94632	27	2380	71.9	91	137
KS91W009-6-1	24	2252	72.4	92	136
Scout 66	2	1899	73.1	96	139
Kharkof	1	1779	73.8	98	139
Mean		3263	74	95	138
LSD (0.05)		625	1.7	8	4
C.V. (%)		12.6	1.6	6.5	1.9

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Farmington New Mexico, Four Replications						
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1	Lodging (%)
G15111	45	10698	79.3	85	140	0
XH1881	34	10525	79.7	92	138	0
KS95H176-1	19	9352	80.0	98	140	3
XH1872	36	9110	80.6	85	132	0
W95-221	32	8989	80.6	87	134	0
G14264	41	8920	80.0	86	132	0
XH1875	35	8903	81.0	86	137	0
TX91D6856	10	8851	80.4	86	139	0
G15048	42	8748	80.0	84	137	0
OK95571	6	8713	81.3	88	132	0
T102	40	8662	80.4	89	135	0
KS90175-3	20	8506	79.3	92	139	0
KS95H167-3	18	8403	80.0	95	136	0
KS95HW62-6	17	8351	80.4	89	138	8
T101	39	8316	79.3	79	134	0
KS91W009-6-1	24	8230	78.7	90	137	0
G15011	43	8196	80.0	91	135	0
W94-244-132	30	8178	80.4	82	130	0
KS89180B-2-1	21	8144	78.0	82	139	0
WX94-3504	33	8109	80.0	90	132	0
TAM-107	3	8006	80.4	82	129	0
KS97W0935-29-15	23	7937	78.4	90	137	0
G15458	44	7920	80.6	91	137	0
TX91D6825	9	7833	79.1	91	139	13
KS97P0630-4-5	22	7730	79.1	87	138	0
CO940700	16	7402	81.0	85	138	0
TX94V2130	15	7367	80.0	80	135	0
OK94P549	4	7316	79.7	90	137	0
T99	37	7264	79.3	95	139	0
T100	38	7229	79.1	97	137	0
TX95V4926	12	7178	78.0	82	137	0
W95-210	28	7160	81.0	86	134	0
N95L158	25	7126	78.7	79	133	0
W95-188	29	7022	79.7	90	136	0
OK95548	5	6988	81.3	83	135	0
TX95V4933	13	6884	78.0	84	139	0
TX95V5332	14	6850	78.7	84	137	0
NE93496	26	6746	79.1	97	137	0
TX94V2327	11	6695	78.4	89	135	55
OK95G701	8	6505	81.3	86	135	0
OK95593	7	6229	79.3	82	131	0
W95-301	31	6177	78.7	81	130	0
Scout 66	2	6108	79.7	99	128	8
NE94632	27	5953	79.3	87	132	0
Kharkof	1	5228	78.4	114	140	0
Mean		7794	79.7	88.2	135.6	
LSD (0.05)		1315				
C.V. (%)		12.0				

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

McGregor, Texas Four Replications						
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1	Response to powdery mildew (0-
KS89180B-2-1	21	3618	74.3	83	103	3
W95-188	29	3593	78.8	93	104	8
KS95HW62-6	17	3585	78.4	84	102	7
KS90175-3	20	3571	78.0	83	104	2
KS97P0630-4-5	22	3569	76.8	82	100	6
KS97W0935-29-15	23	3500	76.9	91	104	5
XH1872	36	3477	74.6	90	102	4
OK95593	7	3340	77.3	88	97	9
TX91D6856	10	3335	73.1	77	105	4
WX94-3504	33	3312	74.3	86	103	3
W94-244-132	30	3265	76.5	88	105	6
TX94V2327	11	3245	72.1	84	102	7
OK94P549	4	3226	77.1	93	103	4
XH1875	35	3179	73.1	95	104	0
TX91D6825	9	3115	73.4	90	107	3
T101	39	3090	74.9	93	104	2
TAM-107	3	3021	72.9	95	98	0
G15458	44	3003	73.8		107	5
KS95H167-3	18	2999	74.0	83	105	0
XH1881	34	2984	69.9	94	107	0
T100	38	2932	70.8	85	100	5
T102	40	2908	74.3	94	99	6
G15111	45	2850	74.0		108	0
OK95548	5	2795	73.0	68	106	0
G15011	43	2740	71.1		106	5
CO940700	16	2739	75.6	89	105	7
KS91W009-6-1	24	2730	66.6	80	117	1
G14264	41	2683	76.0		102	4
OK95571	6	2583	74.3	80	109	9
OK95G701	8	2570	78.2	80	100	8
TX95V5332	14	2547	72.4	87	109	4
W95-301	31	2516	73.5	85	112	8
W95-210	28	2455	69.5	85	112	0
T99	37	2447	74.6	89	105	9
TX94V2130	15	2443	75.7	84	100	5
NE94632	27	2414	68.2	91	108	5
N95L158	25	2338	68.5	75	114	7
NE93496	26	2034	75.6	99	118	3
Scout 66	2	1946	74.2	110	115	2
W95-221	32	1940	72.1	84	114	8
KS95H176-1	19	1821	72.8	88	119	9
TX95V4933	13	1796	71.1	78	118	2
G15048	42	1674	71.2		113	7
TX95V4926	12	1586	69.3	77	118	0
Kharkof	1	770	70.7	107	123	2
Mean		2762				
LSD (0.05)		811				
C.V. (%)		20.9				

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Bushland (dryland), Texas Three Replications					
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1
XH1872	36	3178	70.7	67	123
TX94V2130	15	3058	75.5	66	123
OK95571	6	3028	73.2	69	123
KS90175-3	20	2989	75.2	70	126
XH1875	35	2975	72.2	68	124
KS89180B-2-1	21	2958	72.2	66	127
OK95593	7	2932	76.6	71	123
G15111	45	2903	73.1	56	126
TAM-107	3	2876	72.2	72	123
NE93496	26	2873	77.9	75	127
CO940700	16	2868	75.2	66	124
KS97P0630-4-5	22	2864	74.0	68	125
T102	40	2821	75.2	69	124
G15011	43	2807	74.5	71	124
OK95548	5	2771	73.2	65	124
TX94V2327	11	2721	70.5	68	126
XH1881	34	2697	69.5	66	124
G15458	44	2696	76.2	67	126
WX94-3504	33	2657	76.4	69	123
W94-244-132	30	2651	77.3	67	124
TX91D6856	10	2646	69.8	65	127
W95-188	29	2638	79.2	73	125
KS91W009-6-1	24	2611	71.3	73	127
G14264	41	2586	76.6	67	124
T100	38	2531	74.9	73	125
OK95G701	8	2447	77.2	65	124
TX95V5332	14	2434	76.1	69	127
KS95H176-1	19	2376	73.0	75	127
G15048	42	2371	72.6	62	128
T101	39	2269	69.5	62	123
N95L158	25	2234	74.1	65	126
KS97W0935-29-15	23	2213	76.1	71	124
T99	37	2179	74.8	69	126
KS95HW62-6	17	2145	78.9	66	126
OK94P549	4	2142	74.6	69	125
NE94632	27	2085	74.6	67	122
W95-301	31	2064	76.6	69	124
W95-221	32	1919	74.5	64	127
TX91D6825	9	1914	72.7	69	126
TX95V4933	13	1849	76.4	63	126
KS95H167-3	18	1837	78.0	68	125
W95-210	28	1702	78.0	69	126
Scout 66	2	1689	73.9	79	127
TX95V4926	12	1462	76.7	64	126
Kharkof	1	1399	73.0	82	135
Mean		2468	74.5	68	125
LSD (0.05)		438		5	1
C.V. (%)		10.9		4.3	0.4

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Bushland (irrigated), Texas Three Replications							
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1	Lodging %	Shattering g %
LINE	ENTRY	KGHA	79.8	PHT	HDT	LODG	SHAT
TX94V2130	15	7017	79.4	90	125	3	0
KS95HW62-6	17	6713	79.3	91	129	13	2
G15111	45	6699	79.0	92	129	0	2
OK94P549	4	6650	76.6	98	126	12	1
XH1875	35	6479	76.3	95	126	0	1
TX91D6856	10	6379	78.2	87	129	7	0
N95L158	25	6352	78.6	89	129	0	0
TAM-107	3	6344	77.7	96	124	3	0
KS95H167-3	18	6317	77.9	99	127	5	2
G15011	43	6314	79.5	101	128	0	1
OK95548	5	6253	76.2	87	126	0	1
TX95V4933	13	6212	76.4	94	129	0	4
TX95V4926	12	5994	80.3	92	129	0	1
OK95593	7	5950	79.8	93	124	17	1
T102	40	5863	78.9	93	126	3	1
OK95571	6	5856	77.9	91	126	7	0
KS95H176-1	19	5811	80.2	102	133	0	0
WX94-3504	33	5771	79.3	95	125	0	7
W94-244-132	30	5703	78.4	97	126	3	6
KS97P0630-4-5	22	5698	79.2	93	128	0	2
G15048	42	5672	77.3	96	131	0	2
KS89180B-2-1	21	5665	75.2	95	130	0	1
XH1881	34	5612	77.3	103	128	0	9
W95-221	32	5538	81.0	96	131	17	0
G15458	44	5361	80.7	96	129	0	3
G14264	41	5315	78.8	95	126	3	1
XH1872	36	5270	82.2	94	124	5	6
OK95G701	8	5141	79.2	89	126	23	4
W95-301	31	5069	80.3	94	127	0	2
W95-188	29	4996	78.1	102	128	0	11
W95-210	28	4987	78.4	95	130	3	4
CO940700	16	4979	80.4	96	126	3	2
KS90175-3	20	4968	78.9	97	128	7	4
T99	37	4518	78.6	99	128	23	6
Scout 66	2	4512	78.6	99	129	60	0
TX95V5332	14	4428	75.2	98	130	10	3
TX94V2327	11	4425	79.5	95	129	27	3
NE93496	26	4375	77.1	104	130	30	2
T101	39	4358	80.2	92	125	7	5
T100	38	4341	74.0	102	126	10	3
KS91W009-6-1	24	4077	75.9	98	131	7	3
TX91D6825	9	3903	75.8	98	129	33	7
KS97W0935-29-15	23	3745	78.9	98	126	0	5
NE94632	27	3644	77.3	94	124	12	3
Kharkof	1	2743	78.4	109	137	80	1
Mean		5378	78.4	96	128		
LSD (0.05)		769		3	1		
C.V. (%)		8.8		4.4	1.3		

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Chillicothe, Texas Three Replications					
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1
34	XH1881	4903	76.9	78	105
36	XH1872	4674	76.6	79	103
11	TX94V2327	4472	77.5	71	105
15	TX94V2130	4156	79.6	69	105
33	WX94-3504	4136	78.0	76	104
30	W94-244-132	4075	78.0	75	110
40	T102	4069	78.3	73	104
44	G15458	4022	75.9	75	112
20	KS90175-3	3968	79.7	72	105
45	G15111	3941	77.5	63	109
38	T100	3934	78.2	82	104
41	G14264	3867	76.9	75	106
14	TX95V5332	3860	76.6	73	112
35	XH1875	3847	76.8	80	105
18	KS95H167-3	3840	77.4	79	105
9	TX91D6825	3813	68.2	72	107
13	TX95V4933	3813	74.5	69	114
29	W95-188	3806	78.8	78	109
7	OK95593	3773	76.6	70	105
31	W95-301	3766	77.1	76	114
37	T99	3732	74.4	82	108
39	T101	3712	77.1	70	70
6	OK95571	3685	77.0	70	105
43	G15011	3679	73.7	80	119
21	KS89180B-2-1	3665	77.9	70	109
17	KS95HW62-6	3658	78.5	73	105
25	N95L158	3658	75.3	70	118
10	TX91D6856	3645	79.5	69	107
16	CO940700	3638	77.1	74	105
27	NE94632	3632	78.1	75	107
22	KS97P0630-4-5	3625	77.0	71	105
23	KS97W0935-29-15	3618	76.0	75	105
42	G15048	3564	78.8	71	116
4	OK94P549	3490	79.8	69	105
8	OK95G701	3490	77.3	66	116
24	KS91W009-6-1	3470	72.8	76	118
28	W95-210	3457	77.5	74	115
32	W95-221	3443	79.4	76	116
19	KS95H176-1	3389	76.3	77	119
5	OK95548	3363	78.4	64	104
3	TAM-107	3356	75.1	60	102
12	TX95V4926	3336	76.6	68	115
2	Scout 66	3329	75.9	95	116
26	NE93496	2878	77.5	83	116
1	Kharkof	2280	75.8	90	125
	mean	3719	76.9	79	109
	l.s.d. (0.05)	712.85			
	CV (%)	11.8			

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Altus, Oklahoma		Three Replications		
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm
KS90175-3	20	3744	76.9	73
KS97P0630-4-5	22	3698	75.3	72
W95-188	29	3615	77.8	82
CO940700	16	3588	76.6	73
WX94-3504	33	3560	76.8	77
TX91D6856	10	3481	73.3	70
XH1872	36	3475	74.9	73
G15111	45	3431	77.5	68
T101	39	3402	72.4	72
TX94V2327	11	3400	74.7	75
XH1875	35	3400	74.0	80
TX94V2130	15	3380	77.9	78
T102	40	3361	78.7	75
T100	38	3336	78.3	80
KS89180B-2-1	21	3323	75.6	67
W94-244-132	30	3310	76.9	80
OK95548	5	3303	75.6	70
T99	37	3230	77.0	83
OK95571	6	3217	74.9	73
OK94P549	4	3208	76.8	72
OK95G701	8	3208	79.3	77
KS97W0935-29-15	23	3205	74.8	78
G14264	41	3190	78.9	72
XH1881	34	3176	71.3	77
G15458	44	3165	76.8	75
TX95V5332	14	3095	76.2	78
NE94632	27	3095	74.9	78
KS95H167-3	18	3088	76.5	78
OK95593	7	3041	77.1	75
TAM-107	3	3013	73.8	75
TX95V4933	13	3009	74.4	72
KS95HW62-6	17	2988	78.3	73
N95L158	25	2961	71.1	68
TX91D6825	9	2927	73.8	78
G15011	43	2794	75.7	78
W95-301	31	2767	76.4	78
W95-210	28	2701	75.9	73
NE93496	26	2645	77.5	85
KS91W009-6-1	24	2638	69.7	73
TX95V4926	12	2608	75.2	77
KS95H176-1	19	2274	73.5	78
G15048	42	2236	75.1	72
W95-221	32	2200	73.1	73
Scout 66	2	1937	74.9	88
Kharkof	1	1657	73.3	88
Mean		3069		
LSD (0.05)		342		
C.V. (%)		6.90		

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Goodwell, Oklahoma Three replications						
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1	Head shattering (0-9)
OK95593	7	7512	71.7	132	88	2
XH1872	36	7267	72.9	131	93	1
OK95571	6	7166	70.0	132	91	2
OK94P549	4	7148	70.8	134	93	1
KS95HW62-6	17	7114	75.7	135	92	2
TX95V4933	13	7091	66.7	135	90	1
TX94V2130	15	7076	72.5	133	90	1
TX95V4926	12	6947	67.1	135	91	1
WX94-3504	33	6942	73.4	134	91	1
XH1881	34	6933	68.0	134	92	3
N95L158	25	6910	68.0	135	91	2
TAM-107	3	6908	72.5	131	93	1
KS95H167-3	18	6903	73.1	134	93	2
TX91D6856	10	6872	68.9	136	91	1
T102	40	6860	71.7	134	91	2
G15011	43	6786	70.8	134	93	1
KS97P0630-4-5	22	6761	71.9	134	91	3
XH1875	35	6605	69.7	134	92	1
KS89180B-2-1	21	6540	66.2	135	91	2
OK95548	5	6506	67.7	133	87	2
OK95G701	8	6273	75.1	134	93	4
G15111	45	6239	72.4	135	82	2
G14264	41	6234	72.6	133	90	2
W94-244-132	30	6192	70.4	135	89	1
TX94V2327	11	6112	66.8	135	92	4
W95-210	28	5956	70.7	136	91	2
CO940700	16	5952	72.9	134	94	6
G15458	44	5879	70.6	136	90	3
W95-221	32	5875	69.4	136	95	1
KS95H176-1	19	5773	66.7	138	97	2
W95-188	29	5726	74.4	135	95	2
T100	38	5633	73.9	133	97	2
T99	37	5593	72.2	135	95	3
G15048	42	5500	68.0	137	93	1
T101	39	5398	67.5	133	91	2
KS90175-3	20	5367	70.4	135	94	3
NE93496	26	5342	70.7	135	97	2
W95-301	31	4975	71.1	134	95	3
TX95V5332	14	4959	70.3	136	93	4
NE94632	27	4699	67.7	132	91	5
KS91W009-6-1	24	4688	63.7	137	93	5
Scout 66	2	4612	73.9	135	101	3
TX91D6825	9	4453	68.2	135	96	6
KS97W0935-29-15	23	3721	68.1	135	94	9
Kharkof	1	1978	69.3	143	103	5
Mean		6043				
LSD (0.05)		609				
C.V. (%)		6.2				

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Lahoma, Oklahoma Three Replications						
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1	Lodging (%)
XH1872	36	5827	77.4	107	119	5
OK95593	7	5489	78.2	97	123	0
KS90175-3	20	5396	77.5	95	124	0
TX91D6856	10	5385	74.8	95	125	3
KS97P0630-4-5	22	5366	73.8	95	125	0
OK95548	5	5280	76.0	85	123	0
KS89180B-2-1	21	5220	74.6	93	125	38
OK95571	6	5170	75.3	102	123	5
KS95H167-3	18	5098	76.6	108	124	2
XH1875	35	5086	73.9	102	123	10
WX94-3504	33	4993	77.7	100	123	0
KS95HW62-6	17	4985	76.4	100	125	2
OK94P549	4	4942	77.1	100	124	2
XH1881	34	4828	74.2	105	124	2
W95-188	29	4718	77.7	105	126	13
TX94V2327	11	4708	75.6	103	125	2
TX95V4926	12	4614	71.6	98	127	0
W94-244-132	30	4586	73.7	100	127	7
T101	39	4528	69.7	90	122	65
T102	40	4453	76.1	97	122	3
T99	37	4374	77.7	110	125	2
T100	38	4334	79.3	107	122	5
W95-210	28	4311	74.9	102	131	5
G15111	45	4261	72.9	90	125	35
OK95G701	8	4256	78.2	98	123	48
NE94632	27	4205	71.6	100	125	2
TAM-107	3	4114	72.1	97	125	0
G15458	44	4110	73.0	93	126	20
G14264	41	4105	75.7	93	123	20
KS91W009-6-1	24	4071	66.7	100	133	33
TX95V4933	13	4062	69.7	98	127	18
TX95V5332	14	4049	76.4	113	128	2
W95-301	31	3996	75.6	102	129	5
CO940700	16	3988	74.7	105	123	7
TX94V2130	15	3893	74.7	93	120	7
N95L158	25	3857	68.5	95	132	17
TX91D6825	9	3753	74.6	113	125	5
NE93496	26	3667	74.6	115	130	0
G15011	43	3664	71.9	103	125	12
KS95H176-1	19	3556	72.4	110	132	13
KS97W0935-29-15	23	3303	73.7	105	125	0
G15048	42	2911	71.1	95	131	20
Scout 66	2	2860	76.5	125	130	37
W95-221	32	2796	68.0	92	132	13
Kharkof	1	1596	75.7	123	NA	58
Mean		4328				
LSD (0.05)		493				
C.V. (%)		7.1				

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Stillwater, Oklahoma Three Replications					
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1
TX91D6856	10	5168	73.9	83	116
XH1881	34	4743	71.5	97	116
XH1872	36	4729	74.4	90	113
KS90175-3	20	4713	74.4	88	116
WX94-3504	33	4675	74.0	87	115
KS97W0935-29-15	23	4584	74.8	93	116
XH1875	35	4435	73.3	95	115
OK95548	5	4404	76.1	78	114
T101	39	4288	68.1	82	113
KS97P0630-4-5	22	4281	77.7	85	116
G15458	44	4243	76.0	95	120
W95-188	29	4225	79.7	97	116
KS89180B-2-1	21	4173	74.8	83	118
TX91D6825	9	4149	75.5	95	117
KS95HW62-6	17	4141	78.8	85	117
OK95571	6	4137	78.0	88	115
T102	40	4083	74.3	92	115
OK94P549	4	4030	77.3	88	115
W94-244-132	30	4017	74.6	95	116
T100	38	4005	77.7	97	115
NE94632	27	3931	72.5	90	116
TX94V2327	11	3927	74.6	90	116
OK95593	7	3915	78.3	85	114
W95-210	28	3843	75.9	103	123
TAM-107	3	3750	72.5	83	112
T99	37	3730	76.8	95	116
G15111	45	3694	73.0	82	118
OK95G701	8	3684	79.7	82	116
TX95V5332	14	3515	73.7	93	121
CO940700	16	3463	71.5	92	114
NE93496	26	3458	75.5	107	123
KS95H167-3	18	3402	76.2	93	116
G14264	41	3325	75.2	83	115
KS91W009-6-1	24	3309	66.3	97	125
W95-301	31	3298	74.8	95	122
TX94V2130	15	3287	77.4	85	114
G15011	43	3271	72.6	95	120
TX95V4933	13	3189	71.0	88	121
TX95V4926	12	3000	73.0	92	121
W95-221	32	2667	72.2	100	126
Scout 66	2	2647	76.6	120	122
N95L158	25	2593	70.4	88	125
G15048	42	2299	71.0	90	126
KS95H176-1	19	1924	75.6	97	126
Kharkof	1	1720	74.8	123	128
Mean		3735			
LSD (0.05)		578			
C.V. (%)		9.5			

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Colby, Kansas Three Replications					
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Days to heading from 1/1	Plant height cm
XH1872	36	6200	79.6	137	85
KS89180B-2-1	21	6081	78.6	140	80
G15458	44	5863	80.9	141	83
WX94-3504	33	5739	80.0	137	83
KS97W0935-29-15	23	5685	76.6	139	86
XH1881	34	5652	77.1	139	88
G15048	42	5623	80.4	141	83
G14264	41	5578	79.4	138	78
TX91D6856	10	5554	79.2	141	78
KS95HW62-6	17	5534	80.8	140	85
TX91D6825	9	5510	77.1	140	93
TX94V2327	11	5480	78.4	140	85
OK94P549	4	5479	79.9	138	81
KS97P0630-4-5	22	5475	79.5	140	81
G15011	43	5460	78.5	138	86
KS95H167-3	18	5446	79.2	140	91
KS95H176-1	19	5352	80.1	142	97
CO940700	16	5244	79.9	138	85
XH1875	35	5242	78.0	139	86
TX95V4926	12	5237	77.5	139	81
W95-188	29	5226	81.2	140	90
T102	40	5220	80.1	138	83
KS90175-3	20	5216	80.3	140	81
TAM-107	3	5211	77.1	137	80
G15111	45	5193	78.7	141	71
TX95V4933	13	5186	76.5	139	80
TX95V5332	14	5178	79.3	140	91
OK95G701	8	5171	81.9	138	81
W95-221	32	5121	80.4	141	85
N95L158	25	5120	77.9	140	80
OK95571	6	5064	78.5	137	83
TX94V2130	15	5054	78.6	137	80
OK95548	5	5051	77.9	137	73
NE94632	27	5048	76.5	137	85
T101	39	5034	76.3	137	71
W95-301	31	4942	78.9	138	81
W94-244-132	30	4927	80.2	139	76
OK95593	7	4905	80.4	137	76
KS91W009-6-1	24	4905	75.8	142	83
T99	37	4864	79.0	140	90
W95-210	28	4856	80.4	141	83
NE93496	26	4689	80.1	140	98
T100	38	4582	79.7	138	90
Scout 66	2	4478	80.3	140	103
Kharkof	1	3668	79.1	144	119
Mean		5230			
LSD (0.05)		402			
C.V. (%)		4.73			

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Garden City, Kansas Three Replications					
C.I. or Selection	Entry No.	Yield kg/ha	Volume Weight kg/hl	Plant height cm	Days after 1/1 to maturity
TX95V4926	12	3013	76.6	77	169
OK94P549	4	2916	80.1	83	170
TX91D6856	10	2916	77.7	78	168
TX94V2327	11	2893	75.8	80	169
TX95V4933	13	2890	75.5	78	169
KS95HW62-6	17	2829	79.7	78	168
WX94-3504	33	2812	78.9	78	169
KS89180B-2-1	21	2795	77.7	77	168
TX94V2130	15	2791	79.0	78	167
KS95H167-3	18	2757	78.6	85	168
KS90175-3	20	2736	79.4	80	169
OK95593	7	2733	78.9	75	169
KS97P0630-4-5	22	2733	77.3	75	168
G15111	45	2733	78.4	72	169
XH1872	36	2723	78.7	78	167
XH1881	34	2714	75.4	83	168
G15458	44	2705	79.1	78	170
KS95H176-1	19	2703	77.8	88	171
G15048	42	2687	77.7	75	170
G15011	43	2659	77.8	82	169
XH1875	35	2655	76.8	78	168
TX91D6825	9	2649	76.0	87	168
OK95G701	8	2644	80.5	78	167
W95-221	32	2630	77.4	83	171
G14264	41	2625	79.0	73	167
W95-188	29	2618	79.8	80	169
OK95548	5	2600	79.3	68	169
W94-244-132	30	2580	78.8	78	169
OK95571	6	2568	78.4	77	169
T102	40	2551	78.9	80	168
CO940700	16	2545	78.8	77	168
TAM-107	3	2525	77.2	75	167
TX95V5332	14	2520	77.1	78	169
W95-210	28	2518	77.8	78	170
T101	39	2474	75.0	75	168
T99	37	2463	77.6	85	169
W95-301	31	2463	77.9	82	168
KS97W0935-29-15	23	2437	75.2	83	168
T100	38	2437	78.6	82	168
Scout 66	2	2401	78.2	99	170
NE94632	27	2395	75.7	80	169
N95L158	25	2364	76.2	73	170
NE93496	26	2224	77.6	92	172
KS91W009-6-1	24	2163	73.7	80	170
Kharkof	1	1880	76.9	103	173
Mean		2614	77.8	80	169
LSD (0.05)		443	1.3	6	1
C.V. (%)		10.4	1.0	4.4	0.5

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Hays, Kansas Three Replications									
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Days to heading after 1/1	Plant height cm	Leaf rust		Head shattering (0-9)	Wheat Streak Mosaic Virus**
						% flag leaf infected	Reaction type*		
KS89180B-2-1	21	5801	77.7	138	89	0	R	3	S
WX94-3504	33	5692	80.2	135	94	10	MR	4	MS
XH1875	35	5669	78.6	135	94	5	MS	3	S
KS97P0630-4-5	22	5609	77.5	137	88	1	MR	5	VS
OK94P549	4	5588	79.1	135	95	0	R	4	S
XH1872	36	5568	78.8	134	97	0	R	6	S
XH1881	34	5553	76.7	136	99	5	MR	7	MR
OK95571	6	5521	79.3	134	93	1	MS	4	S
OK95593	7	5414	79.9	135	88	0	R	3	MS
OK95548	5	5407	79.8	134	86	0	R	3	S
TX91D6856	10	5398	78.9	138	84	0	R	3	MS
KS95HW62-6	17	5387	80.6	137	95	1	MS	3	MS
W95-210	28	5387	78.1	139	97	1	MS	3	MS
KS90175-3	20	5317	79.6	136	93	0	R	6	VS
G15111	45	5279	79.4	137	84	0	R	3	S
TAM-107	3	5275	77.7	133	93	100	S	2	MS
W95-301	31	5232	79.4	137	91	0	R	3	MS
G15458	44	5178	80.0	137	90	5	MS	3	S
W94-244-132	30	5158	78.6	136	90	0	R	3	S
TX94V2327	11	5151	77.3	137	95	0	R	3	MR
W95-188	29	5140	80.5	137	102	0	R	4	MS
TX94V2130	15	5127	79.5	134	90	100	S	3	S
T102	40	5118	79.9	135	91	40	S	5	MS
G14264	41	5102	78.9	135	90	80	S	3	S
W95-221	32	4985	77.8	139	96	1	S	3	S
N95L158	25	4972	76.0	139	91	50	S	3	S
KS95H167-3	18	4963	79.1	137	99	5	MS	3	MS
G15048	42	4797	76.9	139	91	80	S	3	S
CO940700	16	4777	80.5	135	91	50	S	5	S
G15011	43	4748	77.6	137	94	100	S	3	S
NE93496	26	4640	77.4	139	104	10	MS	4	S
OK95G701	8	4629	81.6	136	90	50	S/MS	3	S
T101	39	4551	75.6	134	89	5	MS	5	S
TX95V4933	13	4533	75.1	137	91	80	S	3	MS
T99	37	4504	77.3	137	103	20	MS	6	S
TX95V4926	12	4499	76.4	137	93	80	S	3	MS
KS91W009-6-1	24	4497	73.4	140	96	5	MR	5	S
TX91D6825	9	4488	76.4	136	97	1	MR	7	MS
KS95H176-1	19	4450	76.2	140	103	5	MS	3	MS
TX95V5332	14	4380	78.5	138	99	30	S	6	MS
T100	38	4302	80.7	134	97	80	S	6	S
NE94632	27	4190	76.2	135	94	5	MS	7	S
KS97W0935-29-15	23	3954	76.4	136	94	0	R	9	MS
Scout 66	2	3905	79.6	138	113	50	S	3	S
Kharkof	1	2768	74.9	144	111	100	S	3	S
Mean		4947							
LSD (0.05)		350							
C.V. (%)		4.4							

*S=susceptible, MS=moderately susceptible, MR=moderately resistant, R=resistant

** VS=very susceptible, S=susceptible, MS=moderately susceptible, MR=moderately resistant

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Hutchinson, Kansas Three Replications						
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading after 1/1	Leaf rust reaction
KS90175-3	20	3944	75.8	94	130	R
KS97P0630-4-5	22	3552	72.6	90	131	MS
KS89180B-2-1	21	3530	70.5	92	133	MS
KS97W0935-29-15	23	3331	73.3	100	132	MR
W95-188	29	3253	76.0	97	132	MR
OK95548	5	3227	73.4	87	130	MR
WX94-3504	33	3197	73.1	100	130	R
XH1875	35	3191	70.8	97	131	R
G15111	45	3184	69.4	86	132	MR
TX91D6856	10	3101	69.2	92	131	MR
XH1872	36	3067	70.4	102	128	MR
T102	40	3042	73.7	95	129	S
TX94V2327	11	2978	72.0	98	132	S
W94-244-132	30	2929	70.1	92	132	MR
W95-301	31	2888	74.9	93	130	MS
T100	38	2885	70.5	101	130	MS
G15458	44	2847	72.4	97	134	S
XH1881	34	2841	70.6	102	131	R
NE94632	27	2814	70.3	98	130	MR
T101	39	2812	68.2	89	130	S
G14264	41	2802	74.3	93	130	MS
TX95V5332	14	2792	75.1	106	134	MS
OK95593	7	2677	72.4	94	128	VS
T99	37	2596	71.8	103	132	S
CO940700	16	2590	71.2	100	130	MS
OK95571	6	2485	68.2	96	129	VS
NE93496	26	2452	71.9	110	134	MS
W95-210	28	2449	68.9	94	135	R
KS95HW62-6	17	2447	73.6	92	131	VS
TX91D6825	9	2443	69.7	103	132	S
TX95V4926	12	2320	70.3	96	133	S
OK95G701	8	2221	75.4	93	130	VS
TX95V4933	13	2194	69.7	97	132	VS
KS95H167-3	18	2172	70.4	105	132	VS
TAM-107	3	2150	67.9	90	129	R
OK94P549	4	2139	71.0	102	130	MS
KS91W009-6-1	24	1967	63.2	97	135	R
N95L158	25	1778	64.3	93	134	S
TX94V2130	15	1756	71.3	95	129	VS
G15011	43	1717	66.6	99	132	S
Scout 66	2	1572	74.4	111	134	MS
G15048	42	1383	69.8	89	136	S
KS95H176-1	19	1253	73.6	101	135	VS
W95-221	32	1222	67.3	91	136	S
Kharkof	1	964	63.3	111	140	MS
Mean		2559	71.0	97	132	
LSD (0.05)		508	2.9	4.7	2.0	
C.V. (%)		12.3	2.5	3.0	0.9	

*S=susceptible, MS=moderately susceptible, MR=moderately resistant, R=resistant

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Manhattan, Kansas Three Replications									
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Lodging %	Plant height cm	Days to heading after 1/1	Leaf Rust % flag leaf	Green leaf duration 0-9	Soil Borne Mosaic Virus*
WX94-3504	33	5617	77.5	7	95	130	70	6	R
XH1881	34	5200	73.3	23	107	131	30	6	R
W95-301	31	5136	75.4	0	97	133	0	5	R
KS89180B-2-1	21	4960	71.9	0	93	133	2	4	R
KS90175-3	20	4891	74.8	7	100	131	17	7	R
W94-244-132	30	4834	74.9	3	95	131	0	6	R
KS97P0630-4-5	22	4811	73.1	43	97	132	35	6	R
W95-210	28	4475	75.7	20	95	135	15	6	R
W95-188	29	4419	76.2	0	98	133	0	6	S
G15111	45	4395	72.5	0	92	133	22	5	S
TX91D6856	10	4380	71.3	67	95	132	0	6	MR
XH1875	35	4346	73.7	7	98	131	67	7	R
G15458	44	4302	75.4	7	95	133	73	8	R
XH1872	36	4285	74.1	80	102	129	22	7	R
G15011	43	4260	74.9	0	98	132	87	9	R
OK95548	5	4179	73.9	3	85	128	7	6	MR
NE94632	27	4144	72.5	63	97	131	7	6	S
KS91W009-6-1	24	4118	68.8	37	98	136	18	4	MS
T101	39	4117	70.4	53	92	130	47	6	R
TX91D6825	9	4094	72.2	80	100	132	4	5	R
KS97W0935-29-15	23	3943	72.8	40	98	130	15	5	R
OK95593	7	3934	76.2	33	92	128	8	6	R
T99	37	3909	76.5	87	110	132	63	7	R
NE93496	26	3875	75.7	3	107	134	93	7	MR
T100	38	3798	76.3	43	110	130	67	7	R
OK95571	6	3731	72.1	47	97	129	20	6	R
CO940700	16	3628	74.0	7	95	132	87	8	S
TX94V2327	11	3490	73.2	73	97	133	28	7	S
KS95HW62-6	17	3456	76.5	33	95	132	42	6	R
KS95H167-3	18	3440	74.6	3	100	132	43	7	S
OK94P549	4	3424	73.5	13	102	131	27	6	MS
G14264	41	3416	73.8	27	102	131	80	8	R
T102	40	3348	73.1	67	103	130	83	8	R
TX95V4933	13	3336	68.1	33	92	134	87	8	S
OK95G701	8	3327	76.1	60	93	131	60	7	R
N95L158	25	3283	70.6	0	103	135	67	6	R
W95-221	32	3170	70.6	27	93	136	43	6	R
TX95V4926	12	3030	69.3	20	87	134	90	8	S
TAM-107	3	3007	71.6	3	92	127	90	9	S
TX95V5332	14	2926	72.6	30	97	135	83	7	S
TX94V2130	15	2591	72.2	73	93	128	90	9	R
G15048	42	2478	72.8	13	92	136	93	9	R
KS95H176-1	19	2414	75.2	0	95	136	83	8	S
Scout 66	2	2272	73.6	100	102	134	90	9	S
Kharkof	1	2084	76.1	55	108	138	90	9	S
Mean		3828	73.5						
LSD (0.05)		822	2.3						
C.V. (%)		12.3	1.9						

*Reaction types: S=susceptible, MS=moderately susceptible, MR=moderately resistant, R=resistant

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Salina, Kansas		Three Replications		
C.I. or Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	% over 6.5/64 screen
XH1875	35	5259	80.8	60.2
TX91D6856	10	5079	80.0	41.9
KS89180B-2-1	21	5078	79.6	43.1
TX94V2327	11	5054	81.3	62.4
N95L158	25	5023	79.3	56.6
XH1881	34	5000	80.4	34.3
XH1872	36	4989	81.9	60.3
OK95571	6	4949	80.9	63.2
OK95593	7	4936	81.5	38.3
OK94P549	4	4912	81.3	47.6
Big Dawg		4892	80.4	73.8
TX95V4926	12	4871	78.4	30.7
KS91W009-6-1	24	4772	78.2	49.3
W94-244-132	30	4771	81.7	60.4
W95-210	28	4767	81.9	47.6
KS95H176-1	19	4759	80.0	49.2
TX95V4933	13	4753	78.0	30.8
KS95H167-3	18	4724	81.3	67.9
G15048	42	4702	79.7	9.7
W95-221	32	4658	80.1	37.0
W95-301	31	4634	80.1	46.1
G14264	41	4598	80.8	53.0
KS90175-3	20	4597	81.3	53.6
WX94-3504	33	4557	82.0	30.2
T102	40	4549	81.3	44.0
Coronado		4543	81.7	74.9
KS95HW62-6	17	4541	82.8	30.1
NE94632	27	4536	78.9	27.9
CO940700	16	4516	81.5	47.8
OK95548	5	4472	83.1	32.7
G15458	44	4439	81.1	40.1
Ogallala		4397	82.8	34.8
T99	37	4347	82.0	53.3
T101	39	4347	79.2	20.8
KS97P0630-4-5	22	4338	80.4	51.8
T100	38	4324	82.3	53.2
G15011	43	4217	80.4	19.3
TX95V5332	14	4216	79.7	33.3
KS97W0935-29-15	23	4160	79.7	47.6
G15111	45	4158	79.7	46.4
NE93496	26	4124	80.8	41.3
Scout 66	2	4123	80.8	43.9
OK95G701	8	4102	82.8	45.3
TX94V2130	15	4074	81.9	29.1
W95-188	29	3967	82.8	79.0
TAM-107	3	3914	78.6	20.7
TX91D6825	9	3822	79.7	21.8
Kharkof	1	3169	80.0	24.0
Mean		4536		
LSD (0.05)		626		
C.V. (%)		8.5		

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Wichita (I) Kansas, Three Replications								
C.I./Selection	Entry	Yield kg/ha	Volume weight kg/hl	Days to heading from 1/1	Plant height cm	Lodging 0-9	Leaf Rust 0-9	Tan Spot 0 9
XH1872	36	5584	73.6	124	96.5	3	1	6
XH1875	35	5453	72.4	125	106.7	2	1	7
KS90175-3	20	5442	73.0	125	96.5	2	2	5
KS95HW62-6	17	5440	75.3	126	101.6	3	1	7
OK95593	7	5425	73.6	124	91.4	3	2	6
XH1881	34	5348	72.3	126	104.1	2	1	3
W94-244-132	30	5342	73.6	126	104.1	1	1	3
KS89180B-2-1	21	5318	71.3	127	96.5	2	1	5
OK95G701	8	5309	75.7	124	91.4	7	4	4
OK94P549	4	5301	73.8	124	101.6	3	1	5
T102	40	5290	73.7	124	101.6	3	9	3
G14264	41	5198	74.1	125	106.7	8	5	3
KS97P0630-4-5	22	5181	74.0	125	91.4	2	1	6
TX91D6856	10	5122	71.1	127	91.4	2	2	3
WX94-3504	33	5081	74.4	125	91.4	1	1	5
TX94V2130	15	5062	74.1	123	86.4	5	9	3
OK95548	5	5035	72.2	124	86.4	1	2	5
OK95571	6	4924	72.6	124	96.5	3	1	7
T101	39	4859	69.6	124	91.4	3	3	5
NE94632	27	4778	72.8	125	91.4	2	4	5
W95-188	29	4759	75.0	127	109.2	2	1	6
T99	37	4728	75.1	125	106.7	3	3	5
TAM-107	3	4715	71.9	124	96.5	2	9	5
G15011	43	4706	72.6	127	96.5	1	5	6
T100	38	4704	76.8	124	101.6	3	5	5
G15458	44	4611	73.6	127	96.5	2	1	5
TX94V2327	11	4609	72.6	126	101.6	6	1	7
N95L158	25	4526	69.2	129	91.4	1	1	4
KS95H167-3	18	4485	74.6	127	106.7	3	1	7
W95-210	28	4465	72.7	128	91.4	2	1	3
CO940700	16	4396	73.6	124	94.0	3	6	5
G15048	42	4393	71.8	129	86.4	2	4	5
KS91W009-6-1	24	4377	67.2	129	101.6	3	2	2
G15111	45	4375	70.8	127	91.4	3	1	6
NE93496	26	4346	73.8	128	116.8	1	1	5
TX95V4933	13	4344	70.0	127	96.5	4	6	4
KS97W0935-29-15	23	4293	71.3	125	96.5	2	1	2
TX95V4926	12	4277	70.8	128	96.5	3	2	7
W95-221	32	4268	72.4	129	91.4	2	2	4
KS95H176-1	19	4020	72.7	132	106.7	2	1	3
W95-301	31	3935	71.8	128	106.7	2	1	2
TX91D6825	9	3717	70.6	127	106.7	3	1	5
TX95V5332	14	3502	71.1	127	106.7	2	2	5
Scout 66	2	3079	73.5	126	127	4	3	3
Kharkof	1	2112	71.3	132	127	4	3	2
Mean		4672						
LSD (0.05)		712						
C.V. (%)		9.40						

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Wichita (II) Kansas, Three Replications							
C.I./Selection	Entry	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1	Powdery mildew severity (0-9)	Soil borne mosaic virus (0
KS90175-3	20	4742	77.0	89	129	1	1
XH1872	36	4545	77.4	95	126	2	1
QT 7460		4433	76.5	90	126	1	1
KS89180B-2-1	21	4020	73.5	87	131	3	1
QT 7504		3908	73.5	94	126	5	1
KS97W0935-29-15	23	3886	75.7	96	128	3	1
QT 7406		3854	75.7	92	126	2	1
WX94-3504	33	3847	75.7	89	128	1	1
OK95593	7	3843	75.3	85	126	4	1
KS97P0630-4-5	22	3842	75.3	85	129	6	1
W94-244-132	30	3819	77.0	87	132	4	1
KS95HW62-6	17	3759	77.0	88	130	5	1
TX91D6825	9	3682	73.1	97	131	1	1
XH1875	35	3619	73.1	90	130	2	1
W95-210	28	3608	74.4	91	135	1	1
OK95548	5	3554	75.7	76	128	1	2
OK94P549	4	3519	74.0	89	129	3	4
T100	38	3504	77.0	95	127	2	1
TX94V2327	11	3471	74.0	90	130	6	2
G15458	44	3459	71.4	88	134	2	2
XH1881	34	3438	74.0	92	128	1	1
T102	40	3430	76.5	90	127	2	1
T101	39	3357	71.0	85	128	2	1
N95L158	25	3343	71.0	85	134	3	1
TX94V2130	15	3296	76.1	85	127	1	1
W95-301	31	3229	74.0	92	133	4	1
OK95G701	8	3222	78.3	91	128	6	1
G14264	41	3194	74.8	86	128	3	2
OK95571	6	3158	74.8	78	127	2	3
T99	37	3119	76.1	92	129	3	1
NE94632	27	3114	71.8	90	131	4	2
KS91W009-6-1	24	3073	67.5	88	135	1	1
TX91D6856	10	3058	74.4	81	131	2	3
W95-221	32	2916	72.2	91	136	4	1
G15011	43	2764	72.2	93	131	2	1
KS95H167-3	18	2673	74.2	93	129	8	3
NE93496	26	2655	73.5	97	135	2	2
TX95V4926	12	2616	71.0	83	133	5	5
W95-188	29	2534	76.1	88	133	5	5
G15048	42	2502	71.8	86	136	2	1
TX95V4933	13	2383	69.2	82	133	6	4
KS95H176-1	19	2256	73.5	91	135	8	6
CO940700	16	2217	72.7	83	129	1	5
G15111	45	2150	70.1	72	134	1	6
TX95V5332	14	2075	71.4	83	135	2	6
Scout 66	2	1737	74.0	104	137	3	7
TAM-107	3	1693	69.7	80	127	1	6
Kharkof	1	1516	66.7	106	139	3	7
Mean		3178	73.8	89	131	3	2
LSD (0.05)		780	2.5	6	1.5		
C.V. (%)		15.10	2.1	4.1	0.7		

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Winfield, KS Three Replications		
C.I. or Selection	Entry No.	Yield kg/ha
XH1872	36	3879
G14264	41	3752
WX94-3504	33	3748
KS89180B-2-1	21	3729
W95-301	31	3724
XH1881	34	3676
W94-244-132	30	3673
KS90175-3	20	3609
T102	40	3597
TX94V2130	15	3581
KS97W0935-29-15	23	3465
T101	39	3445
XH1875	35	3427
T100	38	3281
T99	37	3221
TX91D6856	10	3209
G15458	44	3151
N95L158	25	3115
NE94632	27	3049
TX91D6825	9	2995
KS97P0630-4-5	22	2977
W95-210	28	2940
W95-221	32	2933
KS95HW62-6	17	2859
TX94V2327	11	2849
G15111	45	2823
CO940700	16	2821
TX95V5332	14	2787
TX95V4933	13	2774
G15048	42	2772
OK95593	7	2716
OK95G701	8	2585
NE93496	26	2547
KS95H167-3	18	2536
OK95548	5	2522
G15011	43	2516
TX95V4926	12	2483
OK95571	6	2450
W95-188	29	2448
TAM-107	3	2428
OK94P549	4	2351
KS91W009-6-1	24	2305
Kharkof	1	2293
KS95H176-1	19	2177
Scout 66	2	1870
Mean		2980
LSD (0.05)		407
C.V. (%)		8.4

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Burlington Colorado, Three Replications			
C.I./Selection	Entry No.	Yield kg/ha	Volume weight kg/hl
KS89180B-2-1	21	4433	75.3
N95L158	25	4332	74.5
TX94V2130	15	4317	78.2
XH1872	36	4286	74.9
KS95HW62-6	17	4240	77.3
TX95V4926	12	4198	74.0
TX95V4933	13	4143	74.0
Halt		4085	72.9
G15011	43	4011	74.5
XH1875	35	4010	72.8
KS95H167-3	18	3938	74.2
KS95H176-1	19	3932	74.0
KS90175-3	20	3901	77.0
Akron		3862	74.7
KS97P0630-4-5	22	3808	73.5
WX94-3504	33	3788	77.5
XH1881	34	3767	72.1
TAM-107	3	3724	73.5
OK95593	7	3722	77.5
W94-244-132	30	3704	77.2
NE94632	27	3674	73.0
G14264	41	3672	76.6
TX91D6856	10	3650	71.1
G15458	44	3638	75.8
OK95548	5	3618	76.1
KS97W0935-29-15	23	3606	71.5
CO940700	16	3552	74.1
W95-221	32	3510	75.1
W95-210	28	3508	75.7
G15048	42	3504	74.5
TX94V2327	11	3487	68.9
NE93496	26	3467	77.1
W95-301	31	3463	76.0
Arlin		3462	77.4
T102	40	3457	76.8
TX95V5332	14	3436	74.6
T99	37	3427	75.0
W95-188	29	3407	77.7
T100	38	3375	76.0
OK95571	6	3227	73.7
OK95G701	8	3227	75.8
Prowers		3226	75.1
KS91W009-6-1	24	3191	69.1
G15111	45	3168	73.0
OK94P549	4	3080	72.1
TX91D6825	9	3070	68.0
T101	39	2813	69.6
NE840557		2756	75.6
Scout 66	2	2665	76.2
Kharkof	1	2635	74.6
Mean		3603	74.5
LSD (0.05)		538	
C.V. (%)		9.20	

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Ft. Collins Colorado, Three Replications			
C.I./Selection	Entry No.	Yield kg/ha	Volume weight kg/hl
XH1872	36	5438	72.8
G15048	42	5185	73.5
CO940700	16	5055	72.7
G15011	43	5016	72.8
XH1875	35	4965	71.9
XH1881	34	4937	70.1
TX91D6856	10	4832	70.3
OK95548	5	4793	70.1
WX94-3504	33	4792	72.7
G15458	44	4693	69.6
NE94632	27	4656	71.3
TX94V2327	11	4648	69.3
T100	38	4631	73.5
OK94P549	4	4623	72.3
TAM-107	3	4611	71.6
Halt		4597	72.0
TX94V2130	15	4579	72.5
OK95571	6	4535	71.4
OK95G701	8	4532	73.6
Prowers		4521	73.5
N95L158	25	4445	70.5
KS95H176-1	19	4442	73.1
W95-221	32	4421	73.1
T101	39	4402	70.3
T99	37	4399	72.7
NE93496	26	4393	72.0
T102	40	4392	72.1
Akron		4378	72.2
G15111	45	4266	72.3
W94-244-132	30	4251	72.3
TX91D6825	9	4226	70.7
NE840557		4221	74.2
Scout 66	2	4131	72.8
Arlin		4124	72.6
KS97W0935-29-15	23	4103	69.7
W95-188	29	4058	73.6
G14264	41	4039	70.0
W95-210	28	4035	72.2
TX95V4933	13	4030	70.1
TX95V5332	14	4003	70.0
TX95V4926	12	3955	69.9
KS95HW62-6	17	3934	74.2
KS97P0630-4-5	22	3910	72.0
KS95H167-3	18	3883	72.9
KS89180B-2-1	21	3747	67.6
KS91W009-6-1	24	3727	67.0
W95-301	31	3583	69.8
KS90175-3	20	3542	69.4
Kharkof	1	3283	71.5
OK95593	7	3257	72.3
Mean		4344	71.6
LSD (0.05)		746	
C.V. (%)		10.60	

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Julesburg Colorado, Three Replications			
C.I./Selection	Entry No.	Yield kg/ha	Volume weight kg/hl
G15048	42	4745	80.3
TX91D6856	10	4687	77.7
KS97P0630-4-5	22	4631	78.9
T102	40	4593	80.1
TX91D6825	9	4535	77.9
XH1881	34	4509	78.7
Akron		4489	80.0
XH1875	35	4480	79.5
Prowers		4416	81.0
OK94P549	4	4337	80.0
TAM-107	3	4329	78.7
G15458	44	4291	80.4
KS95H167-3	18	4284	80.0
XH1872	36	4276	79.7
G15011	43	4255	80.5
TX94V2327	11	4253	78.3
OK95G701	8	4224	82.0
WX94-3504	33	4177	81.4
TX95V4926	12	4172	77.6
KS97W0935-29-15	23	4108	78.3
T99	37	4106	79.5
W95-210	28	4093	80.6
Halt		4066	78.7
NE94632	27	4064	78.0
KS91W009-6-1	24	4004	76.6
G14264	41	3998	79.9
CO940700	16	3966	79.9
G15111	45	3965	77.2
KS90175-3	20	3903	80.3
T101	39	3898	78.2
TX94V2130	15	3887	80.6
OK95571	6	3870	78.0
KS89180B-2-1	21	3862	77.9
W94-244-132	30	3853	81.2
W95-188	29	3848	82.0
TX95V5332	14	3840	78.5
KS95H176-1	19	3827	79.7
W95-221	32	3816	79.9
Scout 66	2	3770	79.4
OK95593	7	3722	79.4
W95-301	31	3711	79.3
OK95548	5	3698	79.6
KS95HW62-6	17	3670	81.5
NE840557		3658	79.0
N95L158	25	3619	79.0
T100	38	3581	79.8
NE93496	26	3459	80.1
TX95V4933	13	3240	77.4
Arlin		3200	79.5
Kharkof	1	3180	79.3
Mean		4023	79.4
LSD (0.05)		796	
C.V. (%)		12.20	

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Wash Colorado, Three Replications			
C.I./Selection	Entry No.	Yield kg/ha	Volume weight kg/hl
TX95V4933	13	3867	72.2
KS95H176-1	19	3848	74.3
XH1881	34	3702	71.4
KS95HW62-6	17	3652	76.1
T102	40	3647	77.1
TX95V5332	14	3637	74.6
G15011	43	3566	75.2
OK94P549	4	3554	77.6
TX95V4926	12	3538	73.5
XH1872	36	3528	75.8
G15048	42	3516	74.4
KS90175-3	20	3499	76.1
TX94V2130	15	3496	77.5
KS95H167-3	18	3489	75.1
CO940700	16	3459	77.2
WX94-3504	33	3450	76.2
XH1875	35	3448	72.5
G15111	45	3399	73.7
G14264	41	3369	77.1
W95-221	32	3359	74.1
G15458	44	3348	75.9
TX94V2327	11	3309	70.8
NE840557		3290	76.7
W95-210	28	3274	74.5
KS97P0630-4-5	22	3259	75.1
Halt		3254	74.9
Akron		3212	74.5
TX91D6856	10	3209	71.8
N95L158	25	3178	74.0
W94-244-132	30	3141	76.0
KS89180B-2-1	21	3114	75.1
KS91W009-6-1	24	3112	72.0
T101	39	3106	72.2
Arlin		3004	77.0
KS97W0935-29-15	23	2998	73.0
W95-301	31	2989	75.5
T99	37	2969	74.0
TAM-107	3	2933	74.9
NE94632	27	2922	73.7
W95-188	29	2857	76.6
TX91D6825	9	2843	73.3
Kharkof	1	2817	77.0
Prowers		2808	75.1
OK95G701	8	2784	79.0
T100	38	2749	76.2
OK95593	7	2744	77.5
OK95548	5	2732	76.4
OK95571	6	2715	76.4
NE93496	26	2616	74.6
Scout 66	2	2404	76.1
Mean		3211	75
LSD (0.05)		725	
C.V. (%)		13.90	

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Lincoln Nebraska, Three Replications					
C.I./Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1
LINE	ENTRY	KGHA	TWT	PHT	HDT
TX91D6856	10	5537	74.3	83	139
OK95571	6	5518	72.6	91	139
XH1875	35	5389	74.2	94	137
N95L158	25	5352	73.3	89	140
OK94P549	4	5313	73.3	91	138
XH1872	36	5306	74.7	95	137
W95-221	32	5271	75.9	90	140
WX94-3504	33	5228	74.7	81	137
CO940700	16	5204	75.9	88	139
G15011	43	5188	74.9	94	138
NE94632	27	5182	72.9	88	138
XH1881	34	5170	72.8	98	137
G15048	42	5144	74.9	85	139
G14264	41	5114	74.4	89	137
KS89180B-2-1	21	5090	73.9	83	139
KS95HW62-6	17	5049	76.5	88	140
OK95548	5	5038	73.3	79	137
KS97W0935-29-15	23	4952	73.0	95	138
KS97P0630-4-5	22	4938	73.1	83	139
TAM-107	3	4926	73.9	90	137
T102	40	4916	75.1	90	137
W94-244-132	30	4897	73.8	86	139
OK95593	7	4885	76.1	84	137
T101	39	4881	72.6	84	137
TX95V4926	12	4862	70.8	86	138
T99	37	4824	75.5	97	139
G15458	44	4753	72.9	88	138
KS90175-3	20	4736	74.8	84	139
OK95G701	8	4727	75.9	88	137
KS91W009-6-1	24	4716	69.8	85	141
KS95H167-3	18	4663	74.6	94	139
TX94V2327	11	4602	73.1	91	138
TX95V5332	14	4561	72.4	93	139
NE93496	26	4551	75.7	99	138
W95-301	31	4497	73.3	89	139
TX95V4933	13	4496	70.8	85	138
W95-210	28	4496	74.9	86	138
G15111	45	4432	74.0	83	138
KS95H176-1	19	4404	74.6	100	139
T100	38	4368	76.6	98	138
TX91D6825	9	4229	71.3	93	139
W95-188	29	3922	75.1	97	139
TX94V2130	15	3888	74.0	86	137
Scout 66	2	3796	75.7	107	138
Kharkof	1	2959	76.4	118	141
Mean		4799	74.1	90	138
LSD (0.05)		858			
C.V. (%)		11.00			

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Clay Center Nebraska, Three Replications			
C.I./Selection	Entry No.	Yield kg/ha	Plant height cm
TX91D6856	10	5148	74
WX94-3504	33	5090	78
OK95548	5	5015	66
KS97P0630-4-5	22	4968	73
OK95593	7	4858	73
KS89180B-2-1	21	4848	74
TX91D6825	9	4790	78
TX95V4933	13	4728	75
TX95V5332	14	4691	86
W94-244-132	30	4677	74
XH1881	34	4580	80
TX94V2327	11	4575	77
XH1875	35	4566	76
NE94632	27	4534	78
TX95V4926	12	4505	77
KS97W0935-29-15	23	4470	76
W95-301	31	4447	74
OK95571	6	4410	74
OK94P549	4	4406	76
KS95H176-1	19	4371	87
G15458	44	4348	77
G15048	42	4282	69
KS95H167-3	18	4280	81
W95-188	29	4279	85
KS90175-3	20	4229	70
XH1872	36	4208	77
TAM-107	3	4187	82
KS95HW62-6	17	4185	83
G14264	41	4163	71
CO940700	16	4148	78
T99	37	4135	82
T100	38	4082	83
G15011	43	3970	79
NE93496	26	3957	87
T102	40	3878	74
Scout 66	2	3825	97
T101	39	3816	72
KS91W009-6-1	24	3810	75
W95-210	28	3795	77
OK95G701	8	3787	74
G15111	45	3656	69
W95-221	32	3487	78
TX94V2130	15	3450	73
Kharkof	1	3405	97
N95L158	25	3134	71
Mean		4270	79
LSD (0.05)		900	
C.V. (%)		13.00	

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

North Platte Nebraska, Three Replications				
C.I./Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Plant height cm
KS89180B-2-1	21	6140	76.4	91
N95L158	25	6098	78.4	84
OK95548	5	5554	77.4	84
G15458	44	5504	79.9	
KS97P0630-4-5	22	5352	79.9	84
TX91D6825	9	5320	77.8	89
KS90175-3	20	5246	79.2	89
KS97W0935-29-15	23	5217	76.4	89
WX94-3504	33	5211	80.0	86
KS91W009-6-1	24	4987	76.5	84
W94-244-132	30	4933	80.1	86
T102	40	4900	79.6	86
W95-210	28	4875	80.5	89
CO940700	16	4875	81.3	94
W95-221	32	4809	80.2	86
G15048	42	4726	80.5	84
TX91D6856	10	4712	78.7	80
NE93496	26	4651	79.7	97
XH1875	35	4645	77.4	84
XH1881	34	4533	77.5	89
XH1872	36	4447	78.4	83
OK94P549	4	4375	78.8	86
TX95V4926	12	4359	78.3	89
OK95571	6	4321	77.5	89
G15111	45	4315	77.4	94
G14264	41	4315	79.1	81
TX94V2130	15	4246	76.9	89
TAM-107	3	4139	77.0	89
OK95593	7	4002	80.1	86
T99	37	3979	79.5	
TX95V4933	13	3944	77.1	91
KS95H176-1	19	3935	79.1	102
G15011	43	3933	79.7	84
KS95HW62-6	17	3892	79.9	86
W95-188	29	3837	81.1	89
TX94V2327	11	3794	77.8	91
W95-301	31	3743	77.8	86
TX95V5332	14	3714	78.3	86
T101	39	3705	77.3	79
KS95H167-3	18	3704	79.6	97
T100	38	3683	80.1	86
NE94632	27	3425	77.7	86
OK95G701	8	3347	80.2	89
Scout 66	2	2741	78.6	104
Kharkof	1	2038	76.2	94
Mean		4405	79.0	88
LSD (0.05)		1207		
C.V. (%)		16.90		

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Grant Nebraska, Three Replications					
C.I./Selection	Entry	Yield kg/ha	Plant height cm	Days to heading from 1/1	Lodging 0-9
XH1872	36	6765	82	146	1
WX94-3504	33	6734	82	146	1
KS90175-3	20	6729	87	149	1
XH1881	34	6721	91	147	1
QT 7406		6717	80	146	1
QT 7460		6695	82	147	1
TX91D6856	10	6669	84	148	1
XH1875	35	6536	91	146	1
OK95548	5	6522	76	146	1
NE94632	27	6477	84	145	3
QT 7504		6440	84	146	1
G15458	44	6422	84	147	1
KS89180B-2-1	21	6374	80	149	1
G15111	45	6369	80	149	1
G15048	42	6365	85	148	2
W95-221	32	6354	90	148	1
TX91D6825	9	6326	94	148	1
CO940700	16	6311	86	147	1
KS97W0935-29-15	23	6300	88	148	1
KS95H167-3	18	6280	86	146	1
W94-244-132	30	6275	88	147	1
KS95H176-1	19	6272	101	148	1
TX94V2327	11	6197	87	147	2
W95-210	28	6124	93	150	1
OK95G701	8	6100	79	147	1
N95L158	25	6047	82	147	1
G14264	41	6035	79	146	2
TX95V4933	13	6009	81	148	2
OK94P549	4	6005	87	147	1
TX95V4926	12	6002	85	147	1
OK95571	6	5997	74	145	1
OK95593	7	5982	81	146	2
T99	37	5973	91	147	3
KS95HW62-6	17	5971	84	147	1
T102	40	5967	90	145	1
W95-188	29	5955	94	146	1
T101	39	5829	78	145	1
KS97P0630-4-5	22	5804	83	147	1
G15011	43	5776	84	146	1
KS91W009-6-1	24	5723	90	149	2
W95-301	31	5695	85	145	1
TX95V5332	14	5652	93	148	2
NE93496	26	5649	97	149	2
T100	38	5616	91	146	1
TAM-107	3	5399	83	146	1
TX94V2130	15	5397	78	145	1
Scout 66	2	5035	102	145	9
Kharkof	1	4210	116	151	9
Mean		6100	86	147	1.5
LSD (0.05)		486	3		
C.V. (%)		4.90	4.4		

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Sidney Nebraska, Three Replications		
C.I./Selection	Entry No.	Yield kg/ha
XH1872	36	5528
XH1881	34	5519
G15011	43	4824
OK94P549	4	4679
OK95571	6	4570
KS91W009-6-1	24	4544
T99	37	4517
WX94-3504	33	4419
XH1875	35	4356
KS95H176-1	19	4297
TX94V2327	11	4287
TAM-107	3	4281
G15111	45	4229
G15048	42	4204
KS90175-3	20	4192
T101	39	4093
KS95H167-3	18	4084
W95-221	32	4076
NE93496	26	4068
KS95HW62-6	17	3968
OK95548	5	3948
TX91D6856	10	3942
W95-210	28	3914
KS97W0935-29-15	23	3879
OK95G701	8	3874
G15458	44	3693
NE94632	27	3679
G14264	41	3672
N95L158	25	3670
OK95593	7	3650
W95-301	31	3637
TX95V4933	13	3600
CO940700	16	3471
T100	38	3440
TX94V2130	15	3403
W94-244-132	30	3388
TX91D6825	9	3310
T102	40	3307
KS97P0630-4-5	22	3119
Kharkof	1	3080
W95-188	29	3003
Scout 66	2	2961
KS89180B-2-1	21	2922
TX95V4926	12	2877
TX95V5332	14	2533
Mean		3882
LSD (0.05)		1262
C.V. (%)		20.00

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Alliance Nebraska, Three Replications			
C.I./Selection	Entry No.	Yield kg/ha	Volume weight kg/hl
XH1881	34	6139	66.3
TAM-107	3	5659	72.1
OK95571	6	5633	71.9
TX95V4926	12	5611	71.7
KS97P0630-4-5	22	5525	72.2
G15111	45	5465	70.7
KS89180B-2-1	21	5426	69.7
TX95V4933	13	5201	71.7
W95-188	29	5081	72.0
KS95H167-3	18	5056	75.2
G15011	43	5025	76.2
XH1875	35	4997	70.2
W94-244-132	30	4989	72.9
G15048	42	4905	74.4
W95-221	32	4799	70.8
OK94P549	4	4790	74.2
N95L158	25	4765	67.9
OK95G701	8	4612	76.0
KS97W0935-29-15	23	4610	68.5
TX94V2130	15	4603	73.5
CO940700	16	4558	75.9
KS90175-3	20	4549	70.7
T100	38	4510	74.0
G14264	41	4504	69.8
T99	37	4498	74.3
TX94V2327	11	4487	71.3
XH1872	36	4449	71.6
Scout 66	2	4434	70.6
T102	40	4403	72.4
NE94632	27	4386	68.9
KS91W009-6-1	24	4385	69.3
W95-301	31	4340	69.5
OK95548	5	4258	76.4
NE93496	26	4233	71.7
WX94-3504	33	4139	72.1
W95-210	28	4097	72.6
G15458	44	4075	73.9
Kharkof	1	4069	72.6
TX91D6856	10	4032	71.5
TX91D6825	9	4019	71.3
KS95H176-1	19	3989	72.5
TX95V5332	14	3951	72.5
OK95593	7	3930	74.2
T101	39	3883	70.2
KS95HW62-6	17	3782	76.2
Mean		4641	72.1
LSD (0.05)		ns	
C.V. (%)		21.70	

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Brookings South Dakota, Three Replications					
C.I./Selection	Entry	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1
TX94V2130	15	5701	77.5	77	141
TX95V4926	12	5494	76.0	77	143
OK94P549	4	5490	71.7	73	142
KS95H176-1	19	5481	77.8	88	147
TX91D6825	9	5423	77.8	84	146
TAM-107	3	5389	75.3	79	141
TX95V5332	14	5369	76.0	81	146
TX95V4933	13	5344	77.5	73	143
G15011	43	5297	78.6	80	143
Scout 66	2	5290	74.9	100	144
T99	37	5284	77.5	84	144
W95-188	29	5268	77.8	83	144
XH1872	36	5259	76.0	81	142
KS90175-3	20	5248	75.7	75	145
W95-301	31	5203	78.6	78	144
KS95HW62-6	17	5187	77.1	78	145
T100	38	5167	78.6	83	143
XH1881	34	5154	77.5	80	144
WX94-3504	33	5122	78.2	79	142
KS95H167-3	18	5120	74.6	85	144
NE94632	27	5100	74.9	80	143
G14264	41	5098	76.0	77	142
KS89180B-2-1	21	5093	77.1	74	146
G15111	45	5091	77.8	72	147
OK95G701	8	5086	76.8	75	143
TX91D6856	10	5082	75.7	71	147
T101	39	5068	75.7	71	142
NE93496	26	5012	76.4	89	144
N95L158	25	4956	76.8	75	145
OK95593	7	4952	76.4	77	143
W95-221	32	4941	77.8	82	146
CO940700	16	4914	74.9	79	143
G15458	44	4909	75.7	76	146
KS97W0935-29-15	23	4903	77.5	81	144
W94-244-132	30	4894	78.9	79	143
G15048	42	4876	76.0	74	146
Kharkof	1	4860	75.3	105	149
KS97P0630-4-5	22	4822	79.3	74	145
TX94V2327	11	4806	78.2	81	145
XH1875	35	4806	77.5	78	143
W95-210	28	4797	76.4	80	146
KS91W009-6-1	24	4786	78.2	78	147
OK95548	5	4708	76.0	69	142
OK95571	6	4569	77.1	79	143
T102	40	4459	77.1	79	142
Mean		5086	76.8	79	144
LSD (0.05)		540			
C.V. (%)		6.50			

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Dakota Lakes South Dakota, Three Replications						
C.I./Selection	Entry	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1	Lodgin g 0-9
XH1881	34	7344	77.1	106	148	3
WX94-3504	33	7312	80.4	104	146	3
KS90175-3	20	7077	80.4	102	148	1
W95-221	32	7046	79.7	102	149	1
KS97W0935-29-15	23	6882	77.1	102	148	1
TX91D6856	10	6817	77.8	94	151	3
KS89180B-2-1	21	6759	82.2	97	149	1
XH1872	36	6691	78.9	104	145	4
N95L158	25	6635	76.0	99	147	2
W94-244-132	30	6611	80.0	100	148	3
T102	40	6577	78.9	102	146	3
XH1875	35	6478	78.2	100	148	1
G15458	44	6357	78.9	102	150	2
KS91W009-6-1	24	6248	76.8	105	150	2
OK95548	5	6212	77.5	89	145	1
TX95V4926	12	6194	78.2	99	147	3
CO940700	16	6133	78.9	105	147	2
NE93496	26	6014	78.9	118	146	2
KS97P0630-4-5	22	6012	78.9	100	150	3
W95-210	28	5987	80.4	102	149	4
G15048	42	5983	78.2	98	148	2
OK95571	6	5967	79.7	101	148	2
W95-188	29	5831	80.8	104	149	3
TX95V4933	13	5801	77.1	97	147	2
OK94P549	4	5797	79.3	107	144	3
G15111	45	5784	77.5	96	148	1
G15011	43	5781	77.8	102	148	2
OK95G701	8	5678	80.8	96	148	3
T100	38	5665	79.7	108	147	5
G14264	41	5633	78.2	99	146	7
T101	39	5624	75.7	90	146	2
TX91D6825	9	5544	77.5	106	150	6
KS95H167-3	18	5490	77.5	100	148	5
T99	37	5472	79.7	111	150	6
OK95593	7	5472	79.7	97	147	5
NE94632	27	5447	78.2	101	144	5
W95-301	31	5402	78.2	100	146	4
TX94V2327	11	5194	77.5	101	150	6
KS95HW62-6	17	5151	79.3	99	148	7
TX95V5332	14	5044	77.8	112	150	5
TAM-107	3	4903	75.7	104	145	5
TX94V2130	15	4719	76.8	97	145	8
KS95H176-1	19	4580	78.6	111	150	8
Scout 66	2	3102	77.8	116	147	9
Kharkof	1	2399	76.4	117	154	9
Mean		5841	78.5	102	148	4
LSD (0.05)		955				
C.V. (%)		10.10				

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Winner South Dakota, Three Replications					
C.I./Selection	Entry	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1
XH1881	34	3779	71.3	86	142
TAM-107	3	3528	74.9	84	139
XH1872	36	3293	72.4	86	140
KS95HW62-6	17	3235	74.2	84	142
OK94P549	4	3219	74.6	87	141
XH1875	35	3194	71.3	85	142
W94-244-132	30	3136	70.2	82	140
WX94-3504	33	3136	72.8	80	141
TX91D6856	10	3134	69.1	76	145
KS91W009-6-1	24	3129	66.6	84	144
TX91D6825	9	3120	71.0	87	143
W95-221	32	3111	73.8	82	143
KS97P0630-4-5	22	3098	70.6	80	142
G15011	43	3008	66.6	84	142
T102	40	2984	73.8	83	141
OK95G701	8	2950	75.7	78	141
G15458	44	2943	67.7	83	142
KS89180B-2-1	21	2905	69.5	81	143
CO940700	16	2847	71.3	86	141
TX94V2130	15	2827	69.8	80	140
T100	38	2809	72.4	93	141
OK95593	7	2742	72.0	79	140
KS97W0935-29-15	23	2742	69.1	83	143
W95-301	31	2737	71.3	80	141
OK95571	6	2733	71.3	80	141
G14264	41	2730	71.7	83	142
TX94V2327	11	2699	68.8	86	144
TX95V4933	13	2674	64.4	76	141
G15111	45	2674	70.6	76	146
W95-188	29	2670	74.2	86	142
N95L158	25	2638	68.4	77	142
TX95V5332	14	2632	66.6	88	143
TX95V4926	12	2616	64.8	81	141
G15048	42	2524	68.4	79	142
T99	37	2484	72.4	86	142
KS90175-3	20	2455	70.6	80	143
W95-210	28	2428	76.0	83	143
Scout 66	2	2293	75.3	102	141
T101	39	2293	63.0	76	140
NE93496	26	2253	69.5	90	142
OK95548	5	2049	67.0	74	141
NE94632	27	2022	67.0	82	140
KS95H167-3	18	2013	69.5	82	144
KS95H176-1	19	1838	66.2	92	145
Kharkof	1	1630	72.8	102	150
Mean		2754	70.4	84	142
LSD (0.05)		610			
C.V. (%)		13.60			

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Columbia, Missouri Three Replications									
C.I. or Selection	ENTRY No.	Yield kg/ha	Volume Weight kg/hl	Winter survival (%)	Bacterial Streak (% flag leaves)	Days to heading from 1/1	Septoria - % canopy destroyed at	Lodging (0-9)	Plant height (cm)
XH1872	36	3699	78.5	95	0	130	65	0	88
CO940700	16	3609	78.3	97	0	131	65	0	80
XH1875	35	3587	78.5	95	0	130	58	1	86
WX94-3504	33	3430	79.2	95	0	132	52	0	80
TX94V2327	11	3430	77.7	95	6	131	69	0	83
XH1881	34	3340	77.1	96	0	132	60	1	86
TX94V2130	15	3318	78.5	97	0	129	59	0	81
W94-244-132	30	3251	78.6	93	0	134	64	0	82
KS97P0630-4-5	22	3250	76.3	95	0	132	61	0	77
G15048	42	3250	78.2	94	29	139	55	0	80
N95L158	25	3206	76.8	94	1	139	50	0	78
W95-301	31	3184	78.5	93	0	136	64	0	79
T101	39	3161	77.1	96	0	130	55	0	77
G15011	43	3138	78.0	96	3	135	74	0	87
W95-188	29	3116	78.9	95	0	133	57	0	85
G15458	44	3116	78.4	93	0	135	63	0	79
OK95593	7	3071	79.4	92	1	130	62	0	76
W95-210	28	3071	80.3	92	0	139	47	0	79
W95-221	32	3071	77.9	96	1	140	51	0	88
OK95548	5	3026	78.2	91	0	130	58	0	72
TX95V4933	13	3026	75.9	92	1	135	66	0	80
KS89180B-2-1	21	3004	76.1	95	0	136	65	0	75
TX95V4926	12	2982	76.0	92	2	136	65	0	81
TAM-107	3	2981	76.5	89	0	129	62	0	83
NE93496	26	2959	79.8	91	1	139	65	0	90
T99	37	2892	79.3	94	0	133	66	0	86
TX91D6856	10	2869	77.2	89	0	135	61	0	76
TX95V5332	14	2869	76.8	94	2	136	66	1	91
OK95571	6	2847	78.3	90	0	130	60	0	85
KS95H167-3	18	2825	78.6	96	1	133	76	1	89
KS90175-3	20	2780	78.5	89	0	132	72	0	78
OK95G701	8	2713	80.3	93	0	131	65	1	80
KS97W0935-29-15	23	2713	76.9	95	0	133	58	0	88
KS95H176-1	19	2712	78.6	95	1	140	51	0	89
NE94632	27	2690	76.8	92	0	135	64	0	81
G14264	41	2690	78.4	92	0	131	63	0	81
KS91W009-6-1	24	2668	75.0	92	1	139	37	0	86
T102	40	2645	78.9	94	2	131	57	0	77
TX91D6825	9	2556	77.1	95	0	134	71	1	86
KS95HW62-6	17	2556	80.3	94	0	132	63	1	82
G15111	45	2511	75.6	90	0	134	72	1	75
OK94P549	4	2466	78.9	93	0	131	66	0	83
T100	38	2354	80.6	96	0	130	73	0	83
Kharkof	1	2309	80.7	91	14	142	39	2	115
Scout 66	2	2309	78.4	93	71	139	56	4	102
Mean		2961							
LSD (0.05)		396							
C.V. (%)		8.3							

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Crawfordsville Iowa, Two Replications			
C.I./Selection	Entry	Yield kg/ha	Volume weight kg/hl
OK95571	6	4398	75.0
XH1872	36	4274	75.6
G14264	41	4219	74.5
W95-188	29	4196	78.2
WX94-3504	33	4093	76.4
OK95548	5	4077	75.7
W94-244-132	30	4038	75.7
T102	40	4019	74.6
T101	39	3907	73.9
TAM-107	3	3742	73.3
KS97W0935-29-15	23	3714	73.6
TX94V2327	11	3679	75.5
XH1881	34	3673	73.8
T99	37	3650	76.6
KS97P0630-4-5	22	3650	74.8
KS95H176-1	19	3642	76.4
T100	38	3634	77.5
KS89180B-2-1	21	3544	74.4
XH1875	35	3511	75.1
KS95HW62-6	17	3478	76.5
OK95G701	8	3458	78.1
KS90175-3	20	3428	75.7
OK95593	7	3422	77.3
G15048	42	3368	74.7
OK94P549	4	3352	76.9
G15111	45	3332	72.4
N95L158	25	3332	74.1
NE94632	27	3213	73.6
TX94V2130	15	3206	74.4
TX91D6856	10	3132	73.9
TX95V5332	14	3092	74.5
TX95V4926	12	3075	72.6
NE93496	26	3069	76.5
G15458	44	3059	74.6
W95-210	28	3024	78.0
CO940700	16	2958	75.7
G15011	43	2954	73.1
TX95V4933	13	2938	72.3
KS95H167-3	18	2900	75.3
W95-301	31	2860	74.1
KS91W009-6-1	24	2772	72.6
Scout 66	2	2697	77.2
W95-221	32	2665	75.4
TX91D6825	9	2571	72.3
Kharkof	1	1866	77.3
Mean		3397	75.1
LSD (0.05)		644	
C.V. (%)		9.50	

Table 1. Yield and agronomic performance for 45 wheat grown in the 1998 SRPN.

Bozeman Montana, One Replication						
C.I./Selection	Entry	Yield kg/ha	Volume weight kg/hl	Days to heading from 1/1	Plant height cm	Protein content (%)
CO940700	16	8234.9	81.5	162	96	13.2
XH1881	34	7965.1	80.8	162	93	12.9
W95-188	29	7863.6	81.2	162	96	15.5
W95-221	32	7644.4	82.3	162	81	14.3
TX94V2327	11	7624.2	79.4	162	95	13.5
XH1872	36	7553.3	81.6	160	97	13.1
TX91D6856	10	7532.1	80.8	164	89	13.1
W94-244-132	30	7468.4	81.1	162	85	15.0
KS91W009-6-1	24	7383.8	77.9	165	96	15.0
XH1875	35	7256.2	80.5	162	89	13.7
G15458	44	7195.4	80.8	162	89	14.5
KS89180B-2-1	21	7183.0	76.1	164	79	13.9
KS97P0630-4-5	22	7116.4	80.6	163	84	15.0
KS95H176-1	19	7110.6	81.0	165	105	14.0
N95L158	25	7048.5	80.7	162	87	15.5
WX94-3504	33	6954.0	81.7	160	96	14.5
G15048	42	6766.4	81.0	164	87	15.2
NE93496	26	6734.7	80.5	163	97	15.3
OK95571	6	6701.6	81.4	161	82	13.9
TX94V2130	15	6661.0	81.7	160	88	13.4
NE94632	27	6554.7	78.7	161	87	15.9
T99	37	6494.2	79.5	163	93	13.6
OK95548	5	6425.8	81.1	160	72	13.1
OK94P549	4	6423.4	81.8	162	88	14.3
KS90175-3	20	6345.8	79.4	162	86	14.8
G15011	43	6228.6	79.8	161	88	15.3
T101	39	6217.0	79.9	159	73	14.3
W95-210	28	5889.2	81.0	163	93	15.9
T102	40	5801.3	80.6	161	83	15.0
OK95G701	8	5695.1	83.0	162	83	15.7
T100	38	5640.3	79.6	162	90	14.5
KS95H167-3	18	5618.3	80.3	163	99	15.2
G15111	45	5587.2	81.0	164	78	12.8
TAM-107	3	5543.5	79.0	161	91	14.8
OK95593	7	5428.0	80.3	162	78	14.9
TX95V4933	13	5415.6	78.0	163	83	14.6
KS97W0935-29-15	23	5357.2	78.2	162	90	15.6
TX91D6825	9	5356.6	79.6	165	100	14.1
TX95V5332	14	5309.1	77.9	165	94	15.4
W95-301	31	5133.4	78.5	161	89	16.4
KS95HW62-6	17	5048.2	82.4	164	86	15.3
G14264	41	5003.5	78.8	160	83	17.8
TX95V4926	12	4921.3	77.6	162	82	15.2
Scout 66	2	4716.7	80.8	164	107	15.9
Kharkof	1	4239.8	80.0	169	120	16.3
mean		6364.3	80.2	162.0	90.0	14.7

Table 1. Yield and agronomic performance for 45 wheats grown in the 1998 SRPN.

Lind Washington, Four Replications						
C.I./Selection	Entry	Yield kg/ha	Volume weight kg/hl	Plant height cm	Days to heading from 1/1	Protein content (%)
XH1881	34	5775	78.6	134	94	8.8
XH1872	36	5721	78.0	131	88	10.7
TX94V2327	11	5700	76.9	135	93	10.5
TX91D6856	10	5694	79.3	138	85	8.7
KS97P0630-4-5	22	5613	78.4	136	86	11.0
W95-188	29	5443	79.0	134	95	9.9
TX91D6825	9	5424	78.4	137	95	9.4
KS89180B-2-1	21	5337	78.6	138	81	9.3
OK94P549	4	5288	81.0	134	89	9.7
CO940700	16	5181	79.6	132	90	8.7
XH1875	35	5138	79.3	134	90	10.0
WX94-3504	33	5056	80.6	132	83	10.2
Finley		5027	80.7	141	115	9.8
TX95V4933	13	4979	76.7	134	84	9.7
G14264	41	4938	78.4	132	83	11.1
G15458	44	4901	77.8	134	88	8.8
N95L158	25	4876	79.5	134	82	10.7
T99	37	4850	76.8	134	95	9.0
KS95HW62-6	17	4832	80.6	135	84	9.3
Hatton		4762	76.2	147	110	8.5
NE93496	26	4670	80.6	132	97	10.1
KS97W0935-29-15	23	4660	77.6	135	89	10.2
Buchanan		4650	80.9	141	108	9.7
TX95V5332	14	4625	75.0	136	95	10.8
OK95G701	8	4609	82.2	132	83	10.5
T102	40	4536	79.2	132	86	9.5
TX95V4926	12	4419	75.5	135	83	9.9
KS91W009-6-1	24	4386	77.2	136	90	9.5
W94-244-132	30	4381	78.5	134	77	10.6
G15048	42	4330	75.5	135	83	8.7
G15011	43	4321	78.3	132	94	9.8
W95-301	31	4304	78.3	132	84	11.3
OK95571	6	4243	80.0	131	88	9.8
KS95H176-1	19	4223	73.9	138	103	8.4
KS90175-3	20	4186	79.6	134	84	10.6
G15111	45	4128	77.7	136	77	8.8
KS95H167-3	18	4012	75.8	134	92	9.3
T100	38	3994	78.8	131	95	10.1
W95-210	28	3954	80.8	133	84	10.6
T101	39	3927	78.9	132	79	10.2
W95-221	32	3837	72.2	135	88	9.2
Kharkof	1	3658	78.7	139	120	11.6
Scout 66	2	3506	77.9	132	112	10.2
OK95593	7	2952	78.1	131	74	11.5
TAM-107	3	no data*	75.3	132	84	9.5
OK95548	5	no data*	80.3	131	75	10.8
TX94V2130	15	no data*	77.3	131	82	9.4
NE94632	27	no data*	76.5	131	88	9.8
Mean		4686	78.2	134.2	89.7	9.9
LSD (0.05)		649				
C.V. (%)		9.80				

*Plots excluded from analysis due to rodent damage.

Table 2. Summary of mean yields (kg/ha) for 45 wheats grown in the 1998 Southern Regional Performance Nursery with state means and ranks.

C.I./Selection	ENTRY	Regional		State mean		Ft. Collins		Walsh		Julesburg		Burlington		Crawfordsville		State mean		Manhattan		Hays	
		Colorado		Colorado		Colorado		Colorado		Colorado		Colorado		Iowa		Kansas		Kansas		Kansas	
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
XH1881	34	4755	1	4229	3	4937	6	3702	3	4509	6	3767	15	3673	13	4380	5	5200	2	5553	7
XH1872	36	4726	2	4382	1	5438	1	3528	10	4276	12	4286	4	4274	2	4538	2	4285	14	5568	6
WX94-3504	33	4623	3	4052	9	4792	9	3450	16	4177	16	3788	14	4093	5	4476	4	5617	1	5692	2
KS89180B-2-1	21	4611	4	3789	23	3747	40	3114	28	3862	30	4433	1	3544	18	4590	1	4960	4	5801	1
XH1875	35	4588	5	4226	4	4965	5	3448	17	4480	7	4010	9	3511	19	4318	6	4346	12	5669	3
TX91D6856	10	4560	6	4175	6	4832	7	3209	25	4687	2	3650	21	3132	30	4202	9	4380	11	5398	11
KS97P0630-4-5	22	4451	7	3902	15	3910	38	3259	24	4631	3	3808	13	3650	15	4280	7	4811	7	5609	4
KS90175-3	20	4436	8	3711	30	3542	43	3499	12	3903	26	3901	12	3428	22	4499	3	4891	5	5317	14
W94-244-132	30	4399	9	3737	26	4251	27	3141	27	3853	31	3704	18	4038	7	4226	8	4834	6	5158	19
T102	40	4354	10	4057	8	4392	25	3647	5	4593	4	3457	32	4019	8	4016	15	3348	33	5118	23
OK95548	5	4326	11	3710	31	4793	8	2732	42	3698	39	3618	23	4077	6	4005	16	4179	16	5407	10
OK95571	6	4325	12	3587	36	4535	17	2715	43	3870	29	3227	37	4398	1	3872	22	3731	26	5521	8
OK94P549	4	4314	13	3898	17	4623	14	3554	8	4337	8	3080	41	3352	25	3959	18	3424	31	5588	5
KS95HW62-6	17	4292	14	3874	20	3934	37	3652	4	3670	40	4240	5	3478	20	4028	13	3456	29	5387	12
G15458	44	4259	15	3992	12	4693	10	3348	21	4291	10	3638	22	3059	34	4062	11	4302	13	5178	18
G15111	45	4222	16	3699	33	4266	26	3399	18	3965	25	3168	40	3332	26	3810	24	4395	10	5279	15
N95L158	25	4199	17	3894	19	4445	19	3178	26	3619	41	4332	2	3332	27	3725	28	3283	36	4972	26
G14264	41	4182	18	3770	25	4039	32	3369	19	3998	23	3672	20	4219	3	4029	12	3416	32	5102	24
G15011	43	4181	19	4212	5	5016	4	3566	7	4255	13	4011	8	2954	37	3672	33	4260	15	4748	30
TX94V2130	15	4172	20	4070	7	4579	16	3496	13	3887	28	4317	3	3206	29	3703	30	2591	41	5127	22
TX94V2327	11	4152	21	3924	14	4648	12	3309	22	4253	14	3487	29	3679	12	3997	17	3490	28	5151	20
OK95593	7	4148	22	3361	43	3257	45	2744	41	3722	37	3722	17	3422	23	4065	10	3934	22	5414	9
C0940700	16	4124	23	4008	11	5055	3	3459	15	3966	24	3552	25	2958	36	3637	34	3628	27	4777	29
KS95HI67-3	18	4120	24	3898	18	3883	39	3489	14	4284	11	3938	10	2900	39	3688	32	3440	30	4963	27
TAM-107	3	4106	25	3899	16	4611	15	2933	34	4329	9	3724	16	3742	10	3435	41	3007	39	5275	16
W95-188	29	4084	26	3543	39	4058	31	2857	36	3848	32	3407	35	4196	4	3818	23	4419	9	5140	21
TX95V4933	13	4072	27	3820	22	4030	34	3867	1	3240	44	4143	7	2938	38	3599	35	3336	34	4533	34
TX95V4926	12	4059	28	3966	13	3955	36	3538	9	4172	17	4198	6	3075	32	3531	38	3030	38	4499	36
KS97W0935-29-15	23	4049	29	3704	32	4103	30	2998	31	4108	18	3606	24	3714	11	3906	20	3943	21	3954	43
T101	39	4028	30	3555	38	4402	22	3106	30	3898	27	2813	43	3907	9	3889	21	4117	19	4551	33
G15048	42	4019	31	4238	2	5185	2	3516	11	4745	1	3504	28	3368	24	3482	40	2478	42	4797	28
T99	37	4000	32	3725	29	4399	23	2969	33	4106	19	3427	34	3650	14	3750	27	3909	23	4504	35
W95-221	32	3957	33	3776	24	4421	21	3359	20	3816	35	3510	26	2665	43	3545	37	3170	37	4985	25
W95-210	28	3950	34	3728	28	4035	33	3274	23	4093	20	3508	27	3024	35	3941	19	4475	8	5387	12
TX91D6825	9	3947	35	3669	35	4226	28	2843	37	4535	5	3070	42	2571	44	3711	29	4094	20	4488	38
W95-301	31	3942	36	3437	42	3583	42	2989	32	3711	38	3463	31	2860	40	4020	14	5136	3	5232	17
OK95G701	8	3940	37	3692	34	4532	18	2784	39	4224	15	3227	37	3458	21	3690	31	3327	35	4629	32
T100	38	3931	38	3584	37	4631	13	2749	40	3581	42	3375	36	3634	17	3757	26	3798	25	4302	41
KS95HI76-1	19	3837	39	4012	10	4442	20	3848	2	3827	34	3932	11	3642	16	3265	43	2414	43	4450	39
KS91W009-6-1	24	3822	40	3509	40	3727	41	3112	29	4004	22	3191	39	2772	41	3575	36	4118	18	4497	37
NE94632	27	3822	41	3829	21	4656	11	2922	35	4064	21	3674	19	3213	28	3785	25	4144	17	4190	42
NE93496	26	3792	42	3484	41	4393	24	2616	44	3459	43	3467	30	3069	33	3506	39	3875	24	4640	31
TX95V5332	14	3784	43	3729	27	4003	35	3637	6	3840	33	3436	33	3092	31	3375	42	2926	40	4380	40
Scout 66	2	3181	44	3243	44	4131	29	2404	45	3770	36	2665	44	2697	42	2826	44	2272	44	3905	44
Kharkof	1	2576	45	2979	45	3283	44	2817	38	3180	45	2635	45	1866	45	2273	45	2084	45	2768	45
mean		4120		3805		4344		3211		4023		3603		3397		3832		3828		4947	
LSD (0.05)		240		489		746		725		796		538		644		394		822		350	
CV		11.4		11.6		10.6		13.9		12.2		9.2		9.5		9.1		12.3		4.4	

Table 2. Summary of mean yields (kg/ha) for 45 wheats grown in the 1998 Southern Regional Performance Nursery with state means and ranks.

C.I./Selection	ENTRY	Colby		Garden City		Hutchinson		Wichita I		Wichita II		Winfield		Salina		Columbia		State mean		Clay Center	
		Kansas		Kansas		Kansas		Kansas		Kansas		Kansas		Kansas		Missouri		Nebraska		Nebraska	
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
XH1881	34	5652	6	2714	16	2841	18	5348	6	3438	18	3676	6	5000	6	3340	6	5429	2	4580	11
XH1872	36	6200	1	2723	15	3067	11	5584	1	4545	2	3879	1	4989	7	3699	1	5035	15	4208	26
WX94-3504	33	5739	4	2812	7	3197	7	5081	15	3847	5	3748	3	4557	23	3430	4	5280	4	5090	2
KS89180B-2-1	21	6081	2	2795	8	3530	3	5318	8	4020	3	3729	4	5078	3	3004	22	5575	1	4848	6
XH1875	35	5242	19	2655	21	3191	8	5453	2	3619	11	3427	13	5259	1	3587	3	5227	6	4566	13
TX91D6856	10	5554	9	2916	3	3101	10	5122	14	3058	30	3209	16	5079	2	2869	27	5220	7	5148	1
KS97P0630-4-5	22	5475	14	2733	12	3552	2	5181	13	3842	7	2977	21	4338	32	3250	9	5317	3	4968	4
KS90175-3	20	5216	23	2736	11	3944	1	5442	3	4742	1	3609	8	4597	22	2780	31	5098	11	4229	25
W94-244-132	30	4927	37	2580	28	2929	14	5342	7	3819	8	3673	7	4771	13	3251	8	5154	9	4677	10
T102	40	5220	22	2551	30	3042	12	5290	11	3430	19	3597	9	4549	24	2645	38	4813	25	3878	35
OK95548	5	5051	33	2600	27	3227	6	5035	17	3554	13	2522	35	4472	28	3026	20	5277	5	5015	3
OK95571	6	5064	31	2568	29	2485	26	4924	18	3158	26	2450	38	4949	8	2847	29	5176	8	4410	18
OK94P549	4	5479	13	2916	2	2139	36	5301	10	3519	14	2351	41	4912	10	2466	42	4978	18	4406	19
KS95HW62-6	17	5534	10	2829	6	2447	29	5440	4	3759	9	2859	24	4541	25	2556	39	4576	37	4185	28
G15458	44	5863	3	2705	17	2847	17	4611	26	3459	17	3151	17	4439	29	3116	15	5020	16	4348	21
G15111	45	5193	25	2733	14	3184	9	4375	34	2150	41	2823	26	4158	37	2511	41	4848	23	3656	41
N95L158	25	5120	30	2364	42	1778	38	4526	28	3343	21	3115	18	5023	5	3206	11	5079	13	3134	45
G14264	41	5578	8	2625	25	2802	21	5198	12	3194	25	3752	2	4598	21	2690	35	4826	24	4163	29
G15011	43	5460	15	2659	20	1717	40	4706	24	2764	32	2516	36	4217	34	3138	14	4779	28	3970	33
TX94V2130	15	5054	32	2791	9	1756	39	5062	16	3296	22	3581	10	4074	41	3318	7	4317	43	3450	43
TX94V2327	11	5480	12	2893	4	2978	13	4609	27	3471	16	2849	25	5054	4	3430	5	4731	30	4575	12
OK95593	7	4905	38	2733	12	2677	23	5425	5	3843	6	2716	31	4936	9	3071	17	4731	29	4858	5
C0940700	16	5244	18	2545	31	2590	25	4396	31	2217	40	2821	27	4516	27	3609	2	5019	17	4148	30
KS95HI67-3	18	5446	16	2757	10	2172	34	4485	29	2673	33	2536	34	4724	17	2825	30	4797	27	4280	23
TAM-107	3	5211	24	2525	32	2150	35	4715	23	1693	44	2428	40	3914	43	2981	24	4862	22	4187	27
W95-188	29	5226	21	2618	26	3253	5	4759	21	2534	36	2448	39	3967	42	3116	15	4615	34	4279	24
TX95V4933	13	5186	26	2890	5	2194	33	4344	36	2383	38	2774	29	4753	16	3026	20	4875	21	4728	8
TX95V4926	12	5237	20	3013	1	2320	31	4277	38	2616	35	2483	37	4871	11	2982	23	5068	14	4505	15
KS97W0935-29-15	23	5685	5	2437	38	3331	4	4293	37	3886	4	3465	11	4160	36	2713	32	5110	10	4470	16
T101	39	5034	35	2474	35	2812	20	4859	19	3357	20	3445	12	4347	30	3161	13	4423	42	3816	37
G15048	42	5623	7	2687	19	1383	42	4393	32	2502	37	2772	30	4702	18	3250	9	5084	12	4282	22
T99	37	4864	40	2463	36	2596	24	4728	22	3119	27	3221	15	4347	30	2892	26	4682	32	4135	31
W95-221	32	5121	29	2630	24	1222	44	4268	39	2916	31	2933	23	4658	19	3071	17	4944	19	3487	42
W95-210	28	4856	41	2518	34	2449	28	4465	30	3608	12	2940	22	4767	14	3071	17	4677	33	3795	39
TX91D6825	9	5510	11	2649	22	2443	30	3717	42	3682	10	2995	20	3822	44	2556	39	4937	20	4790	7
W95-301	31	4942	36	2463	37	2888	15	3935	41	3229	23	3724	5	4634	20	3184	12	4544	38	4447	17
OK95G701	8	5171	28	2644	23	2221	32	5309	9	3222	24	2585	32	4102	40	2713	32	4515	39	3787	40
T100	38	4582	43	2437	39	2885	16	4704	25	3504	15	3281	14	4324	33	2354	43	4452	41	4082	32
KS95HI76-1	19	5352	17	2703	18	1253	43	4020	40	2256	39	2177	44	4759	15	2712	34	4594	36	4371	20
KS91W009-6-1	24	4905	38	2163	44	1967	37	4377	33	3073	29	2305	42	4772	12	2668	37	4724	31	3810	38
NE94632	27	5048	34	2395	41	2814	19	4778	20	3114	28	3049	19	4536	26	2690	35	4801	26	4534	14
NE93496	26	4689	42	2224	43	2452	27	4346	35	2655	34	2547	33	4124	38	2959	25	4608	35	3957	34
TX95V5332	14	5178	27	2520	33	2792	22	3502	43	2075	42	2787	28	4216	35	2869	27	4514	40	4691	9
Scout 66	2	4478	44	2401	40	1572	41	3079	44	1737	43	1870	45	4123	39	2309	44	3966	44	3825	36
Kharkof	1	3668	45	1880	45	964	45	2112	45	1516	45	2293	43	3169	45	2309	44	3336	45	3405	44
mean		5230		2614		2559		4672		3178		2980		4536		2961		4836		4270	
LSD (0.05)		402		443		508		712		780		407		626		396		594		900	
CV		4.7		10.4		12.3		9.4		15.1		8.4		8.5		8.3		13.9		13.0	

Table 2. Summary of mean yields (kg/ha) for 45 wheats grown in the 1998 Southern Regional Performance Nursery with state means and ranks.

C.I./Selection	ENTRY	North Platte		Sidney		Lincoln		Grant		State mean		Farmington		Clovis (dryland)		Clovis (irrigated)		State mean		Stillwater		Goodw
		Nebraska		Nebraska		Nebraska		Nebraska		New Mexico		New Mexico		New Mexico		New Mexico		Oklahoma		Oklahoma		Oklaho
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean
XH1881	34	4533	20	6139	1	5170	12	6721	4	5100	1	10525	2	2349	9	3782	20	4920	7	4743	2	6933
XH1872	36	4447	21	4449	27	5306	6	6765	1	4758	6	9110	4	2049	23	4204	9	5324	1	4729	3	7267
WX94-3504	33	5211	9	4139	35	5228	8	6734	2	4483	15	8109	20	2172	16	4074	12	5042	3	4675	5	6942
KS89180B-2-1	21	6140	1	5426	7	5090	15	6374	10	4557	13	8144	19	2370	8	4053	14	4814	11	4173	13	6540
XH1875	35	4645	19	4997	12	5389	3	6536	6	4703	8	8903	7	2034	24	4221	8	4881	8	4435	7	6605
TX91D6856	10	4712	17	4032	39	5537	1	6669	5	4519	14	8851	8	2228	15	3560	23	5227	2	5168	1	6872
KS97P0630-4-5	22	5352	5	5525	5	4938	19	5804	35	3973	28	7730	25	1405	45	3724	22	5026	4	4281	10	6761
KS90175-3	20	5246	7	4549	22	4736	28	6729	3	4449	20	8506	12	1971	28	3883	18	4805	13	4713	4	5367
W94-244-132	30	4933	11	4989	13	4897	22	6275	18	4574	12	8178	18	2429	6	4015	16	4526	18	4017	19	6192
T102	40	4900	12	4403	29	4916	21	5967	32	4787	5	8662	11	2098	20	4571	3	4689	14	4083	17	6860
OK95548	5	5554	3	4258	33	5038	17	6522	7	4450	19	6988	35	2535	4	4461	4	4873	9	4404	8	6506
OK95571	6	4321	24	5633	3	5518	2	5997	28	4875	4	8713	10	2124	19	4747	1	4923	6	4137	16	7166
OK94P549	4	4375	22	4790	16	5313	5	6005	26	4335	24	7316	28	2263	13	4172	11	4832	10	4030	18	7148
KS95HW62-6	17	3892	34	3782	45	5049	16	5971	31	4878	3	8351	14	2800	2	4351	6	4807	12	4141	15	7114
G15458	44	5504	4	4075	37	4753	27	6422	9	3989	26	7920	23	1865	33	3167	33	4349	24	4243	11	5879
G15111	45	4315	25	5465	6	4432	38	6369	11	4928	2	10698	1	2154	17	3375	27	4406	21	3694	27	6239
N95L158	25	6098	2	4765	17	5352	4	6047	23	4457	18	7126	33	2607	3	4306	7	4080	33	2593	42	6910
G14264	41	4315	26	4504	24	5114	14	6035	24	4387	22	8920	6	1847	34	3525	24	4213	30	3325	33	6234
G15011	43	3933	33	5025	11	5188	10	5776	36	4630	9	8196	17	2532	5	4054	13	4129	32	3271	37	6786
TX94V2130	15	4246	27	4603	20	3888	43	5397	43	4716	7	7367	27	2842	1	4603	2	4409	20	3287	36	7076
TX94V2327	11	3794	36	4487	26	4602	32	6197	20	3593	38	6695	39	2032	25	2827	38	4537	17	3927	22	6112
OK95593	7	4002	29	3930	43	4885	23	5982	29	3778	34	6229	41	1892	30	3827	19	4990	5	3915	23	7512
C0940700	16	4875	14	4558	21	5204	9	6311	15	3979	27	7402	26	2064	21	3326	29	4248	28	3463	30	5952
KS95HI67-3	18	3704	40	5056	10	4663	31	6280	17	4590	11	8403	13	2145	18	4176	10	4623	15	3402	32	6903
TAM-107	3	4139	28	5659	2	4926	20	5399	42	4472	17	8006	21	1880	31	4414	5	4446	19	3750	25	6908
W95-188	29	3837	35	5081	9	3922	42	5955	33	3755	35	7022	34	1958	29	3101	34	4571	16	4225	12	5726
TX95V4933	13	3944	31	5201	8	4496	36	6009	25	3940	29	6884	36	1623	40	4049	15	4338	25	3189	38	7091
TX95V4926	12	4359	23	5611	4	4862	25	6002	27	3919	31	7178	31	2007	27	3388	26	4292	27	3000	39	6947
KS97W0935-29-15	23	5217	8	4610	19	4952	18	6300	16	4014	25	7937	22	1843	35	3244	30	3703	39	4584	6	3721
T101	39	3705	39	3883	44	4881	24	5829	34	4439	21	8316	15	2013	26	3958	17	4404	22	4288	9	5398
G15048	42	4726	16	4905	14	5144	13	6365	12	4479	16	8748	9	2272	11	3483	25	3237	43	2299	43	5500
T99	37	3979	30	4498	25	4824	26	5973	30	3876	32	7264	29	2315	10	2897	36	4232	29	3730	26	5593
W95-221	32	4809	15	4799	15	5271	7	6354	13	4350	23	8989	5	2054	22	3167	32	3384	41	2667	40	5875
W95-210	28	4875	13	4097	36	4496	36	6124	21	3449	42	7160	32	1614	42	2500	41	4203	31	3843	24	5956
TX91D6825	9	5320	6	4019	40	4229	41	6326	14	3704	37	7833	24	1673	38	2637	40	3820	36	4149	14	4453
W95-301	31	3743	37	4340	32	4497	35	5695	38	3923	30	6177	42	2384	7	3771	21	3759	38	3298	35	4975
OK95G701	8	3347	43	4612	18	4727	29	6100	22	3514	40	6505	40	1879	32	2907	35	4355	23	3684	28	6273
T100	38	3683	41	4510	23	4368	40	5616	41	3816	33	7229	30	2254	14	2818	39	4327	26	4005	20	5633
KS95HI76-1	19	3935	32	3989	41	4404	39	6272	19	4595	10	9352	3	2270	12	3353	28	3382	42	1924	44	5773
KS91W009-6-1	24	4987	10	4385	31	4716	30	5723	37	3723	36	8230	16	1813	37	2252	43	3676	40	3309	34	4688
NE94632	27	3425	42	4386	30	5182	11	6477	8	3085	43	5953	44	1639	39	2380	42	3983	34	3931	21	4699
NE93496	26	4651	18	4233	34	4551	34	5649	40	3590	39	6746	38	1580	43	3234	31	3778	37	3458	31	5342
TX95V5332	14	3714	38	3951	42	4561	33	5652	39	3502	41	6850	37	1623	41	2871	37	3905	35	3515	29	4959
Scout 66	2	2741	44	4434	28	3796	44	5035	44	3026	44	6108	43	1841	36	1899	44	3014	44	2647	41	4612
Kharkof	1	2038	45	4069	38	2959	45	4210	45	2608	45	5228	45	1474	44	1779	45	1738	45	1720	45	1978
mean		4405		3882		4799		6100		4162		7794		2063		3263		4294		3735		6043
LSD (0.05)		1207		1262		858		486		1052		1519		n.s.		625		763		n.s.		609
CV		16.9		20.0		11.0		4.9		15.6		12.0		28.3		12.5		7.4		9.5		602.0

Table 2. Summary of mean yields (kg/ha) for 45 wheats grown in the 1998 Southern Regional Performance Nursery with state means and ranks.

C.I./Selection	ENTRY #		Lahoma		Altus		State mean		Brookings		Dakota Lakes		Winner		State mean		Chillicothe		Bushland (dryland)		Bushland (irrigated)	
	na	rank	Oklahoma		Oklahoma		South Dakota		South Dakota		South Dakota		South Dakota		Texas		Texas		Texas		Texas	
			mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
XH1881	34	10	4828	14	3176	24	5426	1	5154	18	7344	1	3779	1	4404	4	4903	1	2697	17	5612	23
XH1872	36	2	5827	1	3475	7	5081	3	5259	13	6691	8	3293	3	4373	5	4672	2	3178	1	5270	27
WX94-3504	33	9	4993	11	3560	5	5190	2	5122	19	7312	2	3136	7	4189	12	4138	5	2657	19	5771	18
KS89180B-2-1	21	19	5220	7	3323	15	4919	7	5093	23	6759	7	2905	18	4095	16	3663	25	2958	6	5665	22
XH1875	35	18	5086	10	3400	10	4826	11	4806	39	6478	12	3194	6	4433	3	3847	14	2975	5	6479	5
TX91D6856	10	14	5385	4	3481	6	5011	5	5082	26	6817	6	3134	9	4224	8	3647	27	2646	21	6379	6
KS97P0630-4-5	22	17	5366	5	3698	2	4644	19	4822	38	6012	19	3098	13	4062	19	3625	31	2864	12	5698	20
KS90175-3	20	36	5396	3	3744	1	4926	6	5248	14	7077	3	2455	36	3975	22	3968	9	2989	4	4968	33
W94-244-132	30	24	4586	18	3310	16	4880	8	4894	35	6611	10	3136	7	4143	14	4075	6	2651	20	5703	19
T102	40	15	4453	20	3361	13	4673	18	4459	45	6577	11	2984	15	4251	7	4069	7	2821	13	5863	15
OK95548	5	20	5280	6	3303	17	4323	39	4708	43	6212	15	2049	41	4129	15	3363	40	2771	15	6253	11
OK95571	6	3	5170	8	3217	19	4423	32	4569	44	5967	22	2733	25	4190	11	3685	22	3028	3	5856	16
OK94P549	4	4	4942	13	3208	20	4835	10	5490	3	5797	25	3219	5	4094	17	3490	35	2142	35	6650	4
KS95HW62-6	17	5	4985	12	2988	32	4524	26	5187	16	5151	39	3235	4	4174	13	3663	25	2145	34	6713	2
G15458	44	28	4110	28	3165	25	4737	14	4909	33	6357	13	2943	17	4027	20	4024	8	2696	18	5361	25
G15111	45	22	4261	24	3431	8	4516	27	5091	24	5784	26	2674	28	4514	2	3941	10	2903	8	6699	3
N95L158	25	11	3857	36	2961	33	4743	13	4956	29	6635	9	2638	31	4083	18	3663	24	2234	31	6352	7
G14264	41	23	4105	29	3190	23	4487	28	5098	22	5633	30	2730	26	3922	24	3865	12	2586	24	5315	26
G15011	43	16	3664	39	2794	35	4696	16	5297	9	5781	27	3008	14	4267	6	3679	23	2807	14	6314	10
TX94V2130	15	7	3893	35	3380	12	4415	33	5701	1	4719	42	2827	20	4744	1	4156	4	3058	2	7017	1
TX94V2327	11	25	4708	16	3400	10	4233	40	4806	39	5194	38	2699	27	3874	25	4477	3	2721	16	4425	37
OK95593	7	1	5489	2	3041	29	4388	36	4952	30	5472	35	2742	22	4218	9	3770	19	2932	7	5950	14
C0940700	16	27	3988	34	3588	4	4631	20	4914	32	6133	17	2847	19	3828	28	3638	28	2868	11	4979	32
KS95HI67-3	18	13	5098	9	3088	28	4208	41	5120	20	5490	33	2013	43	3998	21	3840	15	1837	41	6317	9
TAM-107	3	12	4114	27	3013	30	4607	22	5389	6	4903	41	3528	2	4193	10	3358	41	2876	9	6344	8
W95-188	29	31	4718	15	3615	3	4589	23	5268	12	5831	23	2670	30	3814	29	3809	18	2638	22	4996	30
TX95V4933	13	6	4062	31	3009	31	4607	21	5344	8	5801	24	2674	28	3957	23	3811	17	1849	40	6212	12
TX95V4926	12	8	4614	17	2608	40	4768	12	5494	2	6194	16	2616	33	3596	33	3333	42	1462	44	5994	13
KS97W0935-29-15	23	44	3303	41	3205	22	4842	9	4903	34	6882	5	2742	22	3193	42	3620	32	2213	32	3745	43
T101	39	35	4528	19	3402	9	4329	38	5068	27	5624	31	2293	38	3445	37	3708	21	2269	30	4358	39
G15048	42	34	2911	42	2236	42	4461	29	4876	36	5983	21	2524	34	3870	26	3566	33	2371	29	5672	21
T99	37	33	4374	21	3230	18	4413	34	5284	11	5472	34	2484	35	3476	36	3730	20	2179	33	4518	34
W95-221	32	29	2796	44	2200	43	5033	4	4941	31	7046	4	3111	12	3633	31	3441	38	1919	38	5538	24
W95-210	28	26	4311	23	2701	37	4404	35	4797	41	5987	20	2428	37	3382	39	3457	37	1702	42	4987	31
TX91D6825	9	43	3753	37	2927	34	4696	16	5423	5	5544	32	3120	11	3210	41	3813	16	1914	39	3903	42
W95-301	31	38	3996	33	2767	36	4447	30	5203	15	5402	37	2737	24	3587	34	3629	30	2064	37	5069	29
OK95G701	8	21	4256	25	3208	20	4572	24	5086	25	5678	28	2950	16	3693	30	3493	34	2447	26	5141	28
T100	38	32	4334	22	3336	14	4547	25	5167	17	5665	29	2809	21	3603	32	3936	11	2531	25	4341	40
KS95HI76-1	19	30	3556	40	2274	41	3966	43	5481	4	4580	43	1838	44	3859	27	3389	39	2376	28	5811	17
KS91W009-6-1	24	41	4071	30	2638	39	4721	15	4786	42	6248	14	3129	10	3386	38	3470	36	2611	23	4077	41
NE94632	27	40	4205	26	3095	26	4190	42	5100	21	5447	36	2022	42	3120	44	3632	29	2085	36	3644	44
NE93496	26	37	3667	38	2645	38	4427	31	5012	28	6014	18	2253	40	3375	40	2878	44	2873	10	4375	38
TX95V5332	14	39	4049	32	3095	26	4348	37	5369	7	5044	40	2632	32	3575	35	3862	13	2434	27	4428	36
Scout 66	2	42	2860	43	1937	44	3562	44	5290	10	3102	44	2293	38	3176	43	3327	43	1689	43	4512	35
Kharkof	1	45	1596	45	1657	45	2963	45	4860	37	2399	45	1630	45	2141	45	2282	45	1399	45	2743	45
mean			4328		3069		4560		5086		5841		2754		3855		3719		2468		5378	
LSD (0.05)			493		342		940		540		955		610		867		713		438		769	
CV			7.1		6.9		9.9		6.5		10.1		13.6		10.5		11.8		10.9		8.8	

Table 2. Summary of mean yields (kg/ha) for 45 wheats grown in the 1998 Southern Regional Performance Nursery with state means and ranks.

C.I./Selection	ENTRY	Lind	
		Washington	
		mean	rank
XH1881	34	5775	1
XH1872	36	5721	2
WX94-3504	33	5056	12
KS89180B-2-1	21	5337	8
XH1875	35	5138	11
TX91D6856	10	5694	4
KS97P0630-4-5	22	5613	5
KS90175-3	20	4186	32
W94-244-132	30	4381	26
T102	40	4536	23
OK95548	5		
OK95571	6	4243	30
OK94P549	4	5288	9
KS95HW62-6	17	4832	18
G15458	44	4901	15
G15111	45	4128	33
N95L158	25	4876	16
G14264	41	4938	14
G15011	43	4321	28
TX94V2130	15		
TX94V2327	11	5700	3
OK95593	7	2952	41
CO940700	16	5181	10
KS95H167-3	18	4012	34
TAM-107	3		
W95-188	29	5443	6
TX95V4933	13	4979	13
TX95V4926	12	4419	24
KS97W0935-29-15	23	4660	20
T101	39	3927	37
G15048	42	4330	27
T99	37	4850	17
W95-221	32	3837	38
W95-210	28	3954	36
TX91D6825	9	5424	7
W95-301	31	4304	29
OK95G701	8	4609	22
T100	38	3994	35
KS95H176-1	19	4223	31
KS91W009-6-1	24	4386	25
NE94632	27		
NE93496	26	4670	19
TX95V5332	14	4625	21
Scout 66	2	3506	40
Kharkof	1	3658	39
mean		4686	
LSD (0.05)		649	
CV		9.8	

Table 3. Summary of mean yields (kg/ha) and ranks of 45 wheats grown in the 1998 SRPN for 6 intra-regional production zones. (After Peterson, Crop Science 32: 907, 1992)

C.I./Selection	ENTRY	Regional		Southern Plains		Central Plains		North Central Plains		Northern High Plains		Intermountain West		Southern High Plains	
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
XH1881	34	4755	1	4652	3	4309	6	5051	2	5220	2	6949	2	3317	12
XH1872	36	4726	2	4794	2	4606	2	4784	5	5071	4	7052	1	3539	1
WX94-3504	33	4623	3	4627	5	4353	5	5135	1	4965	9	6102	8	3336	10
KS89180B-2-1	21	4611	4	4409	13	4579	3	4803	4	5386	1	5702	23	3398	5
XH1875	35	4588	5	4649	4	4436	4	4668	7	4985	6	6335	5	3376	7
TX91D6856	10	4560	6	4812	1	4161	11	4828	3	4884	13	6459	3	3285	13
KS97P0630-4-5	22	4451	7	4533	7	4250	8	4662	8	5099	3	5751	20	3159	18
KS90175-3	20	4436	8	4558	6	4608	1	4638	9	4924	10	5411	32	3364	8
W94-244-132	30	4399	9	4338	18	4282	7	4761	6	4780	17	5603	25	3232	15
T102	40	4354	10	4366	15	4171	9	4326	22	4757	18	5863	15	3339	9
OK95548	5	4326	11	4521	8	4036	14	4488	11	4784	16	5891	13	3407	4
OK95571	6	4325	12	4413	12	3914	20	4479	13	4685	24	5831	16	3396	6
OK94P549	4	4314	13	4464	10	3968	16	4483	12	4678	26	5742	22	3320	11
KS95HW62-6	17	4292	14	4498	9	4072	13	4287	26	4515	34	5815	18	3472	3
G15458	44	4259	15	4181	21	3947	17	4448	14	4966	8	5744	21	2935	31
G15111	45	4222	16	4405	14	3661	30	4238	33	4746	20	6364	4	3100	21
N95L158	25	4199	17	3885	32	3793	25	4233	34	4997	5	5422	31	3128	19
G14264	41	4182	18	3960	26	4108	12	4345	19	4684	25	6260	7	2977	27
G15011	43	4181	19	3944	28	3445	39	4421	15	4743	22	6035	9	3222	17
TX94V2130	15	4172	20	4347	17	3816	24	3797	43	4584	30	5973	11	3475	2
TX94V2327	11	4152	21	4187	20	4019	15	4173	37	4616	28	5681	24	3016	24
OK95593	7	4148	22	4433	11	4168	10	4368	18	4377	38	4487	44	3229	16
CO940700	16	4124	23	3931	29	3553	32	4327	21	4751	19	5879	14	3007	25
KS95H167-3	18	4120	24	4349	16	3592	31	4041	41	4785	15	5290	34	3241	14
TAM-107	3	4106	25	4116	22	3363	41	4265	29	4743	21	6309	6	3126	20
W95-188	29	4084	26	4273	19	3683	28	4378	17	4559	31	5508	29	2937	30
TX95V4933	13	4072	27	4057	24	3497	37	4251	31	4620	27	5266	35	3035	23
TX95V4926	12	4059	28	3910	31	3511	34	4313	24	4912	12	5107	40	2973	28
KS97W0935-29-15	23	4049	29	3692	38	3848	22	4555	10	4921	11	5566	27	2660	38
T101	39	4028	30	4057	23	3895	21	4261	30	4193	43	6012	10	3051	22
G15048	42	4019	31	3337	42	3425	40	4130	39	4978	7	5912	12	2874	32
T99	37	4000	32	3916	30	3752	26	4281	28	4474	36	5439	30	2840	33
W95-221	32	3957	33	3328	43	3497	36	4320	23	4735	23	5558	28	2650	39
W95-210	28	3950	34	3860	33	3936	19	4199	35	4592	29	5187	38	2594	41
TX91D6825	9	3947	35	3709	36	3525	33	4337	20	4797	14	5787	19	2536	43
W95-301	31	3942	36	3752	35	3940	18	4399	16	4316	40	4798	42	2958	29
OK95G701	8	3940	37	3956	27	3678	29	4179	36	4447	37	5215	36	2777	36
T100	38	3931	38	3990	25	3833	23	4247	32	4224	42	5156	39	2822	34
KS95H176-1	19	3837	39	3391	41	3153	43	3827	42	4551	32	5827	17	2997	26
KS91W009-6-1	24	3822	40	3513	39	3498	35	4298	25	4533	33	5580	26	2607	40
NE94632	27	3822	41	3701	37	3747	27	4286	27	4512	35	5304	33	2545	42
NE93496	26	3792	42	3405	40	3461	38	4156	38	4358	39	5210	37	2670	37
TX95V5332	14	3784	43	3790	34	3292	42	4092	40	4295	41	5106	41	2795	35
Scout 66	2	3181	44	3057	44	2714	44	3357	44	3854	44	4582	43	2151	44
Kharkof	1	2576	45	2000	45	2137	45	2787	45	3300	45	4016	45	1804	45
mean		4120		4045		3805		4327		4664		5629		3014	
LSD (0.05)		240		674		473		533		493		1133		501	
CV		11.4		9.1		9.0		11.1		12.6		11.7		14.1	

Table 4. Mean grain yield and stability analyses* for 45 wheats grown in the 1998 SRPN.

C.I./Selection	ENTRY	Regional average (kg/ha)	Regression coefficient (b)	Coefficient of determination (r^2)	Deviations from regression (mean square)
XH1881	34	4755	1.25	0.92	220356
XH1872	36	4726	1.08	0.91	193580
WX94-3504	33	4623	1.04	0.91	173269
KS89180B-2-1	21	4611	1.03	0.89	202370
XH1875	35	4588	1.09	0.96	79375
TX91D6856	10	4560	1.16	0.93	164856
KS97P0630-4-5	22	4451	0.98	0.88	200552
KS90175-3	20	4436	0.96	0.81	353197
W94-244-132	30	4399	0.97	0.94	96463
T102	40	4354	1.04	0.91	163991
OK95548	5	4326	0.97	0.85	263642
OK95571	6	4325	1.12	0.90	226913
OK94P549	4	4314	1.08	0.90	201336
KS95HW62-6	17	4292	1.05	0.87	264512
G15458	44	4259	1.01	0.94	104768
G15111	45	4222	1.24	0.87	359279
N95L158	25	4199	1.06	0.83	362293
G14264	41	4182	1.07	0.94	109085
G15011	43	4181	1.07	0.91	186808
TX94V2130	15	4172	0.90	0.75	437867
TX94V2327	11	4152	0.85	0.86	179294
OK95593	7	4148	0.90	0.75	421328
CO940700	16	4124	0.97	0.92	125751
KS95H167-3	18	4120	1.16	0.92	178023
TAM-107	3	4106	1.06	0.85	321933
W95-188	29	4084	0.90	0.87	187523
TX95V4933	13	4072	1.04	0.88	238774
TX95V4926	12	4059	1.09	0.90	218002
KS97W0935-29-15	23	4049	0.88	0.73	447955
T101	39	4028	0.93	0.85	176949
G15048	42	4019	1.16	0.87	327779
T99	37	4000	0.91	0.95	62216
W95-221	32	3957	1.22	0.90	290711
W95-210	28	3950	1.00	0.92	146118
TX91D6825	9	3947	0.95	0.80	363883
W95-301	31	3942	0.77	0.83	188292
OK95G701	8	3940	0.94	0.91	131667
T100	38	3931	0.85	0.91	112696
KS95H176-1	19	3837	1.18	0.84	409490
KS91W009-6-1	24	3822	1.01	0.88	217238
NE94632	27	3822	0.83	0.79	298988
NE93496	26	3792	0.92	0.93	102350
TX95V5332	14	3784	0.85	0.88	157969
Scout 66	2	3181	0.83	0.77	320575
Kharkof	1	2576	0.59	0.51	529073

*Stability parameters obtained by regression of entry mean grain yield on environmental index (location mean grain yields).

Table 5. Summary of agronomic and grain yield data for 45 wheats grown in the 1998 SRPN.

C.I./Selection	Entry No.	Yield kg/ha	Volume weight kg/hl	Days to heading from 1/1	Plant height cm	Lodging (0-9)	Lodging (%)
Number of locations*		35	30	22	26	3	4
XH1881	34	4755	74.3	133	90	2	18
XH1872	36	4726	76.2	131	86	3	50
WX94-3504	33	4623	77.2	132	85	2	28
KS89180B-2-1	21	4611	75.1	133	81	1	2
XH1875	35	4588	75.1	133	87	1	20
TX91D6856	10	4560	74.6	132	80	4	74
KS97P0630-4-5	22	4451	75.8	132	83	2	34
KS90175-3	20	4436	76.9	132	83	4	44
W94-244-132	30	4399	76.4	132	83	4	2
T102	40	4354	76.5	132	85	3	50
OK95548	5	4326	76.4	130	78	2	18
OK95571	6	4325	75.7	129	84	3	32
OK94P549	4	4314	76.4	130	86	5	8
KS95HW62-6	17	4292	77.7	132	85	7	24
G15458	44	4259	75.8	134	85	13	6
G15111	45	4222	74.7	134	79	8	34
N95L158	25	4199	73.7	133	82	5	20
G14264	41	4182	76.5	132	82	4	36
G15011	43	4181	75.0	133	86	1	0
TX94V2130	15	4172	76.5	129	82	4	52
TX94V2327	11	4152	74.6	131	86	9	62
OK95593	7	4148	77.1	130	82	8	30
CO940700	16	4124	76.4	131	86	2	4
KS95H167-3	18	4120	75.8	131	88	3	2
TAM-107	3	4106	74.4	130	83	2	4
W95-188	29	4084	77.7	133	89	2	28
TX95V4933	13	4072	73.2	132	82	3	48
TX95V4926	12	4059	73.7	132	83	1	28
KS97W0935-29-15	23	4049	74.7	131	87	2	26
T101	39	4028	73.2	131	80	3	32
G15048	42	4019	75.1	135	81	2	26
T99	37	4000	76.3	133	90	8	52
W95-221	32	3957	74.6	135	86	6	34
W95-210	28	3950	76.4	134	85	2	40
TX91D6825	9	3947	74.1	131	88	9	78
W95-301	31	3942	76.1	134	86	4	4
OK95G701	8	3940	78.5	130	82	8	38
T100	38	3931	77.1	132	90	4	30
KS95H176-1	19	3837	75.2	135	92	10	32
KS91W009-6-1	24	3822	71.9	134	85	2	50
NE94632	27	3822	74.2	132	86	4	70
NE93496	26	3792	76.3	133	93	8	38
TX95V5332	14	3784	75.1	133	88	4	32
Scout 66	2	3181	76.3	133	98	19	60
Kharkof	1	2576	74.9	137	102	21	43

*Only those traits with at least 3 locations reporting are listed. For additional traits see individual location reports (Table 1).

Table 6. Adult plant field reaction of the 1998 Southern Regional Winter Wheat Performance Nursery inoculated to leaf and stem rust at St. Paul, MN. (USDA-ARS, Cereal Disease Laboratory, St. Paul, MN 55108, by D.V. McVey.)

Entry No.		LR 6/23	SR 6/29
1	CI1442	30 S	60 S
2	CI13996	5 S	40 S
3	PI495594	40 S	20 MR-MS
4	OK94P549	T-5 S	40 S
5	OK95548	T S	30 MS-S
6	OK95571	10 S	60 S
7	OK95593	5 S	40 MS-S
8	OK95G701	30 S	30 MR-MS
9	TX91D6825	5 S	5 MR-MS
10	TX91D6856	T S	0
11	TX94V2327	5 S	T R
12	TX95V4926	5-10 S	0
13	TX95V4933	10 S	0
14	TX95V5332	10 S	T R
15	TX94V2130	30 S	60 S
16	CO940700	30 S	60 S
17	KS95HW62-6	5 S	T R
18	KS95H167-3	5 MS-S	T R
19	KS95H176-1	20 S	5 R
20	KS90175-3	T S	5 R
21	KS89180B-2-1	10 S	5 MR-MS
22	KS97P0630-4-5	T S	10 R-MR
23	KS97W0935-29-15	30 S	20 MR-MS
24	KS91W009-6-11	T MS-S	T R
25	N95L158	5 S	T R
26	NE93496	40 S	10 R-MR
27	NE94632	20 S	60 S
28	W95-210	30 S	80 S
29	W95-188	T S	20 R-MR
30	W94-244-132	T S	T S
31	W95-301	T S	10 R-MR
32	W95-221	5 S	40 S
33	WX94-3504	T S	20 MR-MS
34	XH1881	T MS-S	40 MR-MS
35	XH1875	5 S/40 S	40 MR-MS
36	WH1872	5 S	60 S
37	T99	20 S	40 MS-S
38	T100	10 S	80 S
39	T101	30 S	80 S
40	T102	40 S	80 S
41	G14264	40 S	80 S
42	G15048		80 S
43	G15011		80 S
44	G15458		80 S
45	G15111	T S	60 S

Table 7. Heading date and field leaf rust response, SRPN, Prosper, TX (contributed by D. Marshall, Texas A & M).

<i>Entry/Line or cultivar</i>	<i>Heading (days from 1 Jan)</i>	<i>Leaf rust 5 May (% IT)*</i>
1 Kharkof	123	50 S
2 Scout 66	115	10 MS
3 TAM 107	99	75 S
4 OK94P549	100	3 MS-MR
5 OK95548	101	1 MR
6 OK95571	100	10 S
7 OK95593	98	5 MS-S
8 OK95G701	102	35 S
9 TX91D6825	98	30 S
10 TX91D6856	99	5 MS
11 TX94V2327	101	1 MR-MS
12 TX95V4926	113	1 MS
13 TX95V4933	113	10 MS-S
14 TX95V5332	113	5 S
15 TX94V2130	100	80 S
16 CO940700	102	35 S
17 KS95HW62-6	103	5 MS-S
18 KS95H167-3	103	1 MS
19 KS95H176-1	118	1 S
20 KS90175-3	104	1 MS
21 KS89180B-2-1	103	1 MR
22 KS97P0630-4-5	100	35 S
23 KS97W0935-29-15	100	5 MS-S
24 KS91W009-6-1	119	0 0
25 N95L158	115	1 S
26 NE93496	115	0 F
27 NE94632	108	5 S-MS
28 W95-210	114	1 MS
29 W95-188	103	0 0
30 W94-244-132	104	0 0
31 W95-301	113	0 0
32 W95-221	114	0 0
33 WX94-3504	102	20 MS
34 XH1881	100	15 MS-S
35 XH1875	100	5 S-MS
36 WH1872	98	10 S
37 T99	103	25 S
38 T100	99	60 S
39 T101	97	15 S-MS
40 T102	100	70 S
41 G14264	99	80 S
42 G15048	114	15 S
43 G15011	110	50 S
44 G15458	113	5 S-MS
45 G15111	104	30 S
Mean	105.6	17.7
LSD (5%)	1.6	--
CV (%)	2.9	--

* IT is infection types which are 0 = no visible reaction; F = fleck; R = resistant (minute pustules); MR = moderately resistant (small-medium pustules); MS = moderately susceptible (medium pustules); S = susceptible (large pustules).

Table 8. Vernalization response and field leaf rust reactions, 1998 SRPN, Beeville, Texas (D. Marshall, Texas A & M).

<i>Entry</i>	<i>Vernalization response (1-3)*</i>	<i>Leaf rust reaction** 5 March</i>	<i>Leaf rust reaction** 31 March</i>
Kharkof	1	VS	VS
Scout 66	1	MS	MS-MR
TAM 107	1	VS	S
OK94P549	1	MR	MS-S
OK95548	1	R	MR
OK95571	1	MR	MS-S
OK95593	1	VS	S
OK95G701	1	VS	S
TX91D6825	2	VS	S
TX91D6856	1	MR	MR
TX94V2327	1	R	R-MR
TX95V4926	1	VS	S
TX95V4933	1	VS	S
TX95V5332	1	VS	S
TX94V2130	1	VS	VS
CO940700	1	S	S
KS95HW62-6	1	MS	VS
KS95H167-3	1	R	MS-MR
KS95H176-1	1	S	VS
KS90175-3	1	R	MS-MR
KS89180B-2-1	1	R	MS-MR
KS97P0630-4-5	1	R	MS
KS97W0935-29-15	1	MR-MS	S
KS91W009-6-1	1	R	MR
N95L158	1	MS	MS-MR
NE93496	1	S	MS
NE94632	1	VS	S
W95-210	1	MS	MS-MR
W95-188	1	R	R
W94-244-132	1	R	R-MR
W95-301	1	R	R
W95-221	1	MS-S	MS
WX94-3504	1	MS-MR	MR
XH1881	1	R	MR-MS
XH1875	1	R-MR	MS-MR
WH1872	1	R	MS-S
T99	1	R	MR-R
T100	1	VS	VS
T101	1	VS	MS
T102	1	VS	S
G14264	1	VS	S
G15048	1	VS	S-MS
G15011	1	VS	VS
G15458	1	VS	S
G15111	1	S	S-MS

* Vernalization response is 1 = no vernalization; 2 = vernalized but late maturing; and 3 = completely vernalized.

** Leaf rust reactions are R = resistant; MR = moderately resistant; MS = moderately susceptible; S = susceptible; and VS = very susceptible.

Table 9.

1998 SOUTHERN REGIONAL PERFORMANCE NURSERY - LEAF RUST
R.M. Hunger, J. Verchot, W.C. Siegerist, & L. Myers
Oklahoma State University, Stillwater, OK

Entry/selection number	Seedling leaf rust reaction ^Y			Field leaf rust reaction ^Z
	rep 1	rep 2	rep 3	(1-9)
01	CI1442.....S	MS	S	6.3
02	CI13996.....S	S	S	6.7
03	PI495594.....S	S	S	8.0
04	OK94P549.....S	MR	MS	1.7
05	OK95548.....R	R	MR	1.7
06	OK95571.....MR	S	S	4.0
07	OK95593.....S	S	S	3.3
08	OK95G701.....S	MS	S	7.3
09	TX91D6825.....MS	S	S	1.3
10	TX91D6856.....R	Seg-R	Seg-R	1.0
11	TX94V2327.....MS	MS	MS	4.0
12	TX95V4926.....S	S	S	6.7
13	TX95V4933.....S	S	S	6.0
14	TX95V5332.....S	MS	MS	7.0
15	TX94V2130.....S	S	S	8.3
16	CO940700.....S	S	S	8.0
17	KS95HW62-6.....MR	MR	R	4.3
18	KS95H167-3.....Seg-MR	MR	MR	3.3
19	KS95H176-1.....MS	MR	MS	4.7
20	KS90175-3.....R	MR	MR	1.3
21	KS89180B-2-1.....R	MR	MR	1.0
22	KS97P0630-4-5.....MS	MS	MS	2.7
23	KS97W0935-29-15.....S	S	S	2.0
24	KS91W009-6-1.....R	MR	MR	1.7
25	N95L158.....S	S	S	3.7
26	NE93496.....Seg-S	MR	MR	4.7
27	NE94632.....S	S	S	1.3
28	W95-210.....S	S	S	2.0
29	W95-188.....R	R	R	1.0
30	W94-244-132.....MS	MR	MS	1.0
31	W95-301.....MS	S	S	1.0
32	W95-221.....S	S	S	2.0
33	WX94-3504.....R	R	R	5.3
34	XH1881.....Seg-MR	Seg-MR	Seg-MR	3.7
35	XH1875.....Seg-R	MR	MS	5.0
36	XH1872.....R	MR	Seg-R	6.3
37	T99.....S	S	S	7.0
38	T100.....S	S	S	8.0
39	T101.....S	S	S	7.0
40	T102.....S	S	S	8.3
41	G14264.....S	S	S	9.0
42	G15048.....S	S	S	8.3
43	G15011.....S	S	S	8.7
44	G15458.....S	S	S	4.7
45	G15111.....MS	MS	S	1.7

^YLeaf rust reaction was determined on seedlings inoculated with a mixture of *Puccinia recondita* f. sp. *tritici* races with the avirulence/virulence formula of: 9 17 19 26 SXL / 1 2a 2c 3 3ka 11 16 24 30 DNE CTY. Reactions were rated using Stakeman's system (USDA Bull. #E617, 1962, 53 pp) and translated as follows:

S=susceptible MS=moderately susceptible MR=moderately resistant
R=resistant Seg=segregating ('R' or 'S' etc indicates the reaction type of most seedlings).

^ZValues are the average of three replications read at Stillwater, OK, on 14 May 98, where 1-3, 4-6, and 7-9 are levels within the categories, "leaf rust-resistant," "leaf rust-intermediate," and "leaf-rust-susceptible."

Table 10. REACTION OF THE 1998 SOUTHERN REGIONAL PERFORMANCE NURSERY TO SOILBORNE WHEAT MOSAIC VIRUS (SBWMV) AND WHEAT SPINDLE STREAK MOSAIC VIRUS (WSSMV)
R.M. Hunger, J. Verchot, W.C. Siegerist, & L. Myers
Ent. & Plant Path. Dept., Oklahoma State University, Stillwater, OK

Entry/SeIn. No.	Visual (1-4) ^Z	SBWMV/WSSMV reaction ^X	
		ELISA ^Y	
		SBWMV	WSSMV
01 C11442	1.7	±	0
02 C113996	2.3	±	0
03 PI495594	1.3	±	0
04 OK94P549	1.0	±	0
05 OK95548.....	1.7	+	0
06 OK95571.....	2.0	0	0
07 OK95593.....	1.3	0	0
08 OK95G701.....	1.7	±	0
09 TX91D6825	1.7	0	0
10 TX91D6856	1.3	0	0
11 TX94V2327.....	1.7	+	0
12 TX95V4926.....	1.3	+	0
13 TX95V4933.....	1.3	+	0
14 TX95V5332.....	1.7	±	0
15 TX94V2130.....	1.3	±	±
16 CO940700	2.0	+	+
17 KS95HW62-6.....	1.0	±	0
18 KS95H167-3	1.3	±	0
19 KS95H176-1	1.0	+	±
20 KS90175-3.....	1.0	0	0
21 KS89180B-2-1	1.0	0	0
22 KS97P0630-4-5.....	2.0	0	0
23 KS97W0935-29-15.....	2.0	±	0
24 KS91W009-6-1	1.0	0	±
25 N95L158	1.3	0	±
26 NE93496.....	1.0	0	±
27 NE94632.....	1.0	+	0
28 W95-210	1.7	0	0
29 W95-188	1.3	+	±
30 W94-244-132.....	1.7	0	0
31 W95-301	1.3	0	0
32 W95-221	2.0	0	0
33 WX94-3504.....	2.0	0	±
34 XH1881	1.7	0	0
35 XH1875.....	1.7	0	0
36 XH1872.....	1.7	0	0
37 T99.....	2.0	±	0
38 T100.....	2.0	0	±
39 T101.....	1.7	0	0
40 T102.....	1.7	0	±

Table 10 contd. REACTION OF THE 1998 SOUTHERN REGIONAL PERFORMANCE NURSERY TO SOILBORNE WHEAT MOSAIC VIRUS (SBWMV) AND WHEAT SPINDLE STREAK MOSAIC VIRUS (WSSMV)

**R.M. Hunger, J. Verchot, W.C. Siegerist, & L. Myers
Ent. & Plant Path. Dept., Oklahoma State University, Stillwater, OK**

Entry/Seln. No.	Visual (1-4) ^z	SBWMV/WSSMV reaction ^x	
		ELISA ^y	
		SBWMV	WSSMV
41 G14264	1.7	0	0
42 G15048	1.7	0	±
43 G15011	1.0	0	±
44 G15458	1.7	0	±
45 G15111	1.3	+	0

^xSymptom expression of SBWMV was much less than desired for an accurate rating. Thus, rely on these results with caution.

^yELISA=enzyme linked immunosorbent assay. Values from ELISA are indicative of the presence or absence of the virus in tissue and should not be used exclusively to determine reaction (i.e., resistance or susceptibility) to SBWMV or WSSMV. For additional explanation of the use ELISA in evaluating virus reaction, see Hunger et al. 1991. Crop Science 31:900-905. Samples from three reps with 3 wells/per rep were evaluated by ELISA for SBWMV and WSSMV. Presence of SBWMV or WSSMV based on values from ELISA are reported as follows:

- = values from ELISA indicate no virus detected;
- ± = values from ELISA indicate little virus detected;
- + = values from ELISA indicate virus detected.

^zThree reps of each entry were rated for SBWMV/WSSMV symptoms in March, 1998, where:

- 1=no mosaic, no stunting;
- 2=slight mosaic and/or slight stunting;
- 3=moderate mosaic and/or moderate stunting;
- 4=severe mosaic and/or severe stunting.

Table 11. Acid soil tolerance of 45 lines tested in the 1998 SRPN, based on three ratings collected in the field at Enid, OK ($\text{pH}_{\text{H}_2\text{O}} = 4.5$; Al saturation = 32%). From Brett Carver, Oklahoma State University.

Entry No.	Sel. No.	Rating (1-5) ^a		
		12/16/97	4/1/98	5/15/98
1	Kharkof	4	4	4
2	Scout 66	5	5	5
3	TAM-107	5	5	5
4	OK94P549	1	1	1
5	OK95548	2	2	2
6	OK95571	2	2	1
7	OK95593	3	3	3
8	OK95G701	3	2	3
9	TX91D6825	2	1	2
10	TX91D6856	4	4	4
11	TX94V2327	4	4	5
12	TX95V4926	5	5	5
13	TX95V4933	5	5	5
14	TX95V5332	5	5	5
15	TX94V2130	4	3	4
16	CO940700	3	3	3
17	KS95HW62-6	5	5	4
18	KS95H167-3	5	5	5
19	KS95H176-1	5	5	5
20	KS90175-3	4	4	5
21	KS89180B-2-1	3	4	3
22	KS97P0630-4-5	3	4	4
23	KS97W0935-29-15	1	1	2
24	KS91W009-6-1	2	2	2
25	N95L158	2	1	1
26	NE93496	4	5	5
27	NE94632	4	4	4
28	W95-210	3	3	2
29	W95-188	4	5	5
30	W94-244-132	4	5	5
31	W95-301	4	5	5
32	W95-221	2	1	1
33	WX94-3504	3	1	2
34	XH1881	2	2	1
35	XH1875	4	4	4
36	XH1872	3	3	3
37	T99	3	3	3
38	T100	3	4	3
39	T101	3	3	3
40	T102	3	4	4
41	G14264	4	5	5
42	G15048	5	5	5
43	G15011	4	4	4
44	G15458	1	1	1
45	G15111	5	5	5

* Ratings range from 1 (very tolerant) to 5 (very susceptible). Ratings ≤ 2 (1-5 scale) show

desirable levels of tolerance based on plant vigor and tiller production.

Table 12. Presence of rye chromosome arm 1RS and Hessian Fly resistance, 1998 SRPN.

Entry No.	Line or cultivar	1RS Status*	Hessian Fly Resistance**
1	Kharkof	non-1RS	S
2	Scout 66	non-1RS	S
3	TAM 107	1AL.1RS	S
4	OK94P549	1BL.1RS	H
5	OK95548	1BL.1RS	H
6	OK95571	non-1RS	S
7	OK95593	1AL.1RS	S
8	OK95G701	non-1RS	S
9	TX91D6825	non-1RS	S
10	TX91D6856	1BL.1RS	H
11	TX94V2327	non-1RS	S
12	TX95V4926	non-1RS	S
13	TX95V4933	non-1RS	S
14	TX95V5332	non-1RS	S
15	TX94V2130	non-1RS	S
16	C0940700	non-1RS	S
17	KS95HW62-6	non-1RS	S
18	KS95HW167-3	non-1RS	S
19	KS95H176-1	non-1RS	S
20	KS9017S-3	1BL.1RS	S
21	KS89180B-2-1	1BL.1RS	H
22	KS97PO630-4-5	non-1RS	H
23	KS97WO935-29-15	non-1RS	H
24	KS91W009-6-11	non-1RS	S
25	N95L158	non-1RS	S
26	NE93496	1BL.1RS	S
27	NE94632	non-1RS	S
28	W95-210	1AL.1RS	R
29	W95-188	non-1RS	S
30	W94-244-132	1BL.1RS	S
31	W95-301	non-1RS	H
32	W95-221	1AL.1RS	S
33	WX94-3504	1BL.1RS	H
34	XH1881	1BL.1RS	H
35	XH1875	non-1RS	S
36	WH1872	not determined	S
37	T99	not determined	S
38	WX94-3504	1BL.1RS	S
39	T101	non-1RS	S
40	T102	1AL.1RS	S
41	G14264	non-1RS	S
42	G15048	non-1RS	R
43	G15011	non-1RS	S
44	G15458	non-1RS	S
45	G15111	non-1RS	S

*Inferred from presence/absence of rye secalins (seed storage proteins).

*From R. Graybosch, USDA-ARS, Lincoln, NE.

**From J. Hatchett, USDA-ARS, Manhattan, KS.